

A
NEW SYSTEM
OF K
AGRICULTURE;

OR,

A Plain, Easy, and Demonstrative
METHOD of speedily growing Rich:

Proving, by undeniable Arguments,

That every LAND-OWNER, in *England*,
may advance his Estate to a DOUBLE Value,
in the Space of ONE Year's Time.

Together with

Several very curious INSTRUCTIONS, how to feed
OXEN, COWS, and SHEEP, to much greater Profit
than has ever yet been known in *England*.

By a COUNTRY GENTLEMAN.

*The only Gentleman-like way of growing Rich is by the
Art of Husbandry. All other Professions have something
in them of the Mean and Subservient. This alone is
Free and Noble; and the Wealth thus gotten may almost
be said to be of a Man's own Creating.*

Googe of Husbandry.

Malè agitur cum Domino, quem villicus Docet.

Cato, de Agriculturâ.

THE SECOND EDITION.

L O N D O N,

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A NEW
S Y S T E M
O F
AGRICULTURE.

ONE would imagine, that, in an Age so fond of *Gain*, it would be but an impertinent and needless Attempt to court Men to make the *best* of their particular Advantages; yet nothing is a Truth more undeniable, and conspicuous, than that *They*, who are, in *Possesse*, the *richest* in the Kingdom, are, in *Esse*, the most *poor* and miserable.

I appeal to every Part of every County, for a Proof of my Assertion, why else are our *Land-owners* obliged to stoop to the Oppression of the *Money-mongers*?—Why else do the devouring Mortgages consume so many splendid Fortunes? And why do such considerable Numbers of young Heirs live idly and contemptibly, for a tedious train of Years, in order to reduce a little Debt, which has been charged upon their Patrimony.

That it is the Gentlemens own Faults, who suffer these, or any of these Inconveniencies, shall be proved by as plain a Demonstration, as any in *Euclid*; and that the Mortgages, so fatal to the Landed Interest, may easily be cleared by the very Land, so mortgaged. And why this is not made a common Practice, is a Riddle, which requires another *Oedipus*.

I am very sensible, how difficult a Task I have undertaken, to disarm People of that inconsiderate Prejudice, with which they war against all offers of this Nature. 'Tis a surprizing Reflection, that Men should bid Defiance to Reason, and bar a Door against the Entrance of their own Advantage; yet, there is no ridiculous Thing more general.

'Tis a very great Misfortune to *England*, that the Cultivation of her Lands is in the meanest of her People; Men, whose Obscurity of Birth, and Narrowness of Education, do not only render them unable to *make* Improvements, but unwilling to *hear* of them.—They daily see the greatest, and most noble *Effects* of Nature, without a Thought upon their *Causes*; and are so much less active, than the Clods, they deal with, that no *Manure*, no *Culture* can impregnate their Imaginations.

If you tell one of these, that such a Piece of Ground, so and so managed, would produce a very great Improvement—He will content himself to answer, with an unaccountable Stupidity, that, *a great many good Husbands had possessed that Ground before him, and yet it had continued, time out of mind, in its present Condition; that, had it been possible to make such great Advantages, it had certainly been found out in their Time; and that, as for his Part, He don't care to concern himself with Projects.*—Drive him from this Refuge, and he tells You, *that the Charge of the Improvement may be greater than the Profit.* And if, to obviate this Objection too, you name some Neighbour, who, for a trifling Charge, has made a far worse Piece of Ground, of equal Value with the best in the County—*Why, that may be truly—but, then, that was Land of a different*
Na-

Nature, and an honest Man might have worse Luck.

These, or some such miserable Shifts, are the Blinds they build between themselves, and their Prosperity; so that, let his Neighbour grow rich, on one Side of the Hedge, while He starves on the other; let another plow with *two* Horses, while he toils with *four*; 'tis all one to Him; and the more his wiser Friends endeavour to reform him, the more he arms his Ignorance with an impenetrable Obstinacy.

And yet, would this were All:— 'Tis no new thing to find the *Low* Part of Mankind averse to Knowledge; the Frame of their Minds is not moulded to a Relish of Delights, above them.—But that our *Gentlemen*, many of them Persons of Genius, Wit, and Judgment, that *They* should give in to such a vulgar Error, and neglect nothing so much, as those very Lands,

by which they are distinguished among Men; and from whose single Value they receive both their *Honour*, and their *Bread*, is a Misfortune, which, as no *wise* Man can easily account for, so no *good* Man can wish the Continuance of.

Before I finish this Discourse, I shall endeavour to lay open the Causes of this publick Calamity, at large: But will, here, only observe, in general, that there are two Things to be regarded, as *Requisites*, in whatever Profession we apply ourselves to; First, Is it *reputable*? Secondly, Is it *profitable*? And surely, if we were but once convinced, that *Husbandry* were not only the most *gainful* Employment, but the most *noble*, *just*, and *honourable*; —an Employment, which the wisest Writers of Antiquity, *Priests*, *Poets*, *Princes*, and *Philosophers*, have celebrated, and preferred before All other; and

and the greatest *Emperors*, and mightiest *Heroes* of the Universe, not only delighted in, but practised with their own Hands ;—Were we once, I say, convinced of this ;—The Scorn would leave this glorious Art, and fix upon the Follies of those mistaken Judges, who believe it an Employment, *too low* for the Practice of a *Gentleman*.

Behold, says our ingenious *Cowley*, in his excellent Discourse on this Subject,—*Behold the Original, and primitive Nobility of all those great Persons, who are too proud, now, not only to TILL the Ground, but almost to TREAD upon it ; we may talk what we please of LILLIES and LYONS RAMPANT, and spread Eagles in Fields of OR, or ARGENT, but if Heraldry were guided by right Reason, a PLOW in a FIELD ARABLE, would be the most noble, and anti-ent Arms.*

How easy would it be to prove, from the concurrent Testimony of the Antients, the uncontested Superiority of this Art to any other: Nay, a Man might draw Proofs from the Scriptures themselves, that Husbandry is not only a recommended Profession, pleasing to God, and beneficial to Man, but the only worldly Business, we have to do, in this Life, and the very individual Errand, we were sent into Earth upon.—All other Things are subservient to this one great Pillar of the World; *Arts and Sciences* are but the polishing of this Marble; All offices, *Divine, Civil and Military*, are the several Dependencies of this Heavenly Art;—Strength, Honour, Glory, Learning, and Dominion, are the Children of her Influence.

But I will not go so far back;—I need not: Modern Instances abound; and we have Proofs enough from later writers,

writers, nay, from *English* writers, to convince the most *despairing*, of its *Profits*, and the most *disdainful*, of its *Reputation*.—I will bring a Croud of witnesses, whose Depositions you shall hear, and, then, I will proceed to inform you, what the Husbandry, *They* mean is; and how easy to be understood by any Undertaker; though it differs, *all Heaven's Breadth*, from the present clumsy Practice, which usurps the Appellation.

And first, not to mention that learned Nobleman, *Lord Chancellor Bacon*, great Part of whose Natural History is composed of Axioms in Husbandry, for which he found Leisure from the highest office in the Kingdom—Let us hear Sir *Richard Weston*, (almost as great a Man, as the other) in his *Legacy to his Sons*.

“ By Husbandry, *says he*, you may
“ nobly augment your Estates, and

“ will receive so much the more Pro-
 “ fit, and Praise, by how much more
 “ Diligence, and Industry, you govern
 “ your Affairs with.—You will not
 “ only be imitated, but honoured, by
 “ your Neighbours, when they see
 “ your Labours prosper, by convert-
 “ ing barren Ground, which has, as
 “ such, been left unhusbanded for
 “ Ages, into excellent Arable, Pas-
 “ ture, and Meadow.—He certainly
 “ is worthy great Praise, and Honour,
 “ who, possessing a large, and barren
 “ Demefne, constrains it, by his In-
 “ dustry, and Labour, to produce ex-
 “ traordinary Plenty, not only to his
 “ own Profit, but that of the Public
 “ also. *Cato* says, that ’tis a burning
 “ Shame to a Man, not to leave his
 “ Inheritance greater, than he received
 “ it: And that He, who loses, by his
 “ Sloth, what his Lands might yield
 “ him, is a Sinner, and despises the
 “ Libe-

“ Liberality of God.—’Tis a Thing
 “ much celebrated by Antiquity, and
 “ thought the noblest way to gather
 “ Wealth, to employ our Wit and
 “ Money, on our Land, and, by that
 “ means, augment our Estates—If
 “ you observe the common Course of
 “ Things, you will find, that Hus-
 “ bandry is the End, which Men
 “ of all Conditions, aim at :—Why
 “ do *Soldiers, Scholars, Lawyers, Mer-*
 “ *chants*, and Men of *all* Trades, and
 “ Professions, toil, and labour, with
 “ great Eagerness, but to get Money ?
 “ And, when they have got that Mo-
 “ ney, what is their next Aim, but
 “ to purchase Land ?—Why do they
 “ buy Land, but to receive the Profit
 “ it produces ?—And, how shall that
 “ Profit be produced, if not by Hus-
 “ bandry ? So that, by Degrees, let a
 “ Man steer what Course through the
 “ World he pleases, at last, He comes
 “ to

“ to Husbandry ; which, as it is the
 “ most general Employment of Man-
 “ kind, so is it the most natural, and
 “ holy, being commanded by the Mouth
 “ of God himself to the Practice of our
 “ Forefathers. You will find the Im-
 “ provements in Husbandry, when
 “ you once experience them, to be
 “ very delightful to you ; and so ex-
 “ ceeding profitable, that it will make
 “ you diligent ; for no Man, of any
 “ Art, or Science whatsoever, unless
 “ it were a *Gold-maker*, ever pretend-
 “ ed to so much Gain, by any other
 “ means, as you shall see demonstrat-
 “ ed in this Treatise. The *Usurer*
 “ *doubles* but his Principal in seven
 “ Years, even by Interest upon Inter-
 “ est ; But, by my Legacy of Hus-
 “ bandry, you shall learn to do more
 “ than *treble* your Principal in one
 “ Year’s Compass, &c.

Thus

Thus far *Sir Richard*, who published a Book relating to the Practice of Agriculture; And, by one, which followed it long after, by another Hand, under the Title of *Annotations on the Legacy of Husbandry*, we may perceive the great Good, it did the Publick, by putting them upon Improvements, which, till then, they never dreamed of.

Page 220, of *these Annotations*, we have a Letter from a very learned Gentleman, which begins thus.

“ I have read the Book of Husbandry thorow, and am very much
 “ delighted with the many profitable,
 “ and ingenious Discoveries, it contains; insomuch that I could wish
 “ myself a Farmer in the Country,
 “ to play the practical Philosopher in
 “ so agreeable a Manner.—I remember, when I was a Student, in *Cambridge*, I was wont to maintain,
 that

“ that He was no natural Philosopher,
 “ who could not advance his Tillage,
 “ Cattle, Fishing, Fowling, and other
 “ Affairs, with more Dexterity, and
 “ to greater Profit, than another Man,
 “ who pretends no Skill in Nature :
 “ —I have read a like Hint, some-
 “ where in *Ramus*, who refers all Arts
 “ to profitable Use in Man’s Life ;
 “ abhorring the vain Ostentation of
 “ the sophisticated Universities.”

In the same *Annotations*, Page 237,
 we have an Account of the Profit,
 made by one Mr. R. H. who sowed
 Clover, according to *Sir Richard’s Di-*
rections—His words are, as follow.—

“ The Ground, I sowed, was about
 “ two Acres ; I sowed Barley, and af-
 “ ter that 15 lb of Clover-seed on each
 “ Acre ; my whole Charge was much
 “ more than paid by the Crop of Bar-
 “ ley ; and the 28th of *May* next, I
 “ mowed the Clover, and, for that
 “ first

“ first Cutting, refused five Pounds :
 “ In *August*, I mow’d for Seed, and
 “ the whole Year’s Profit of my two
 “ Acres was thirty Pounds, besides the
 “ after-Pasture.”

Then comes Another, with this Certificate.—“ I sow’d four Acres, accord-
 “ ing to your Directions, and had
 “ 20 Bushels of Seed, and 12 Loads
 “ of Hay, at twice mowing ; the first
 “ Crop I mow’d was the 19th of *May*
 “ last ; and, I am sure, I speak much
 “ within Compass, when I tell you,
 “ that my four Acres yielded me, in
 “ this one Year, *Fourscore Pounds.*—

“ *Henry Cruttenden.*”

A Gentleman of Kent, by Name, *Sir Thomas Payton*,—“ did, upon six Acres
 “ of Clover, maintain, from the 15th
 “ of *April* to the 15th of *October*, 13
 “ Cows, 10 Oxen, 3 Horses, and 26
 “ Hogs, which came to the Profit of
 “ 20 Nobles an Acre, for the half
 “ Year

“ Year only.—*Annotations, Page*
245.

Again——“ Certain *Dutchmen* have
“ sent to their own Country for a kind
“ of Trees, called *Flanders Asbes*, which
“ they planted, here, in our Fens of
“ *Lincolnshire*: The Charge amounted
“ to about 3 Shillings a Tree; and they
“ grew so fast with us, that at the End
“ of 3 Years, they were worth twenty
“ Shillings a piece for Timber. *Annot.*
p. 270.

We shall have more of these Examples,
anon: Let us, now, see another Author,
on this Head. Cowley, Edit. 4. P. 98.

“ The *first* Wish of *Virgil* was to be
“ a good *Philosopher*: The *second*, a
“ good *Husbandman*; And God dealt
“ with him, just as he did with *Solo-*
“ *mon*; Because he prayed for Wis-
“ dom in the first Place, he added all
“ Things else, which were to be de-
“ fired; He made him one of the
“ best

“ best Philosophers ; and the *best* Hus-
 “ bandman : And, to adorn, and com-
 “ municate both those Faculties, the
 “ *best* Poet : He made Him, besides
 “ all This, a *rich* Man ; and a Man,
 “ who desired to be *no richer*.—To be
 “ a Husbandman is but a Retreat *from*
 “ the World, as it is *Man's* ; *into* the
 “ World, as it is *God's*.—Husbandry
 “ is, as *Columella* calls it—The nearest
 “ Neighbour, and, without Doubt,
 “ the next in Kindred to Philosophy.
 “ —It does certainly comprehend
 “ more Parts of Philosophy, than any
 “ one Profession, Art, or Science, in
 “ the World besides ; And, therefore,
 “ *Cicero* says, The Pleasures of This
 “ Life come very near to *those* of a
 “ Philosopher's.—There is no other
 “ sort of Life, that affords so many
 “ Branches of Praise to a Panegyrist :
 “ The *Utility* of it to a Man's Self,
 “ The *Usefulness*, or, rather the *Neces-*
 “ *sity*

“ *sity* of it to all the rest of Mankind ;
 “ The *Innocence* ; The *Pleasures* ; The
 “ *Antiquity* ; The *Dignity*.—The *Lu-*
 “ *cre* of it is not, now, so great, in our
 “ Nation, as arises from the Mer-
 “ chandise, and Trade of the City ;
 “ We have no Men, now, fetcht
 “ from the Plow to be made *Lords*,
 “ as they were in *Rome*, to be made
 “ *Consuls*, and *Dictators* ; The Reason
 “ of which is from an evil Custom
 “ among us, that no Men put their
 “ Children to be bred up *Apprentices*
 “ in Husbandry, as in other Trades,
 “ but such, who are so poor, that, when
 “ they come to be Men, they have not
 “ wherewithal to set up in it ; and so
 “ can only farm some small Parcel of
 “ Ground, whose Rent devours all but
 “ the bare Subsistence of the Tenant,
 “ whilst They, who are Proprietors
 “ of the Land, are either too proud,
 “ or,

“ or, for want of Education, too ig-
 “ norant to improve it; though the
 “ Means of doing it be as easy, and
 “ certain in This, as in any other
 “ Track of human Commerce.—If
 “ there were always two or three thou-
 “ sand Youths for 7 or 8 Years bound
 “ to this Profession, that they might
 “ learn the whole Art of it; and, af-
 “ terwards, be enabled, by a mode-
 “ rate Stock to be Masters in it, I
 “ cannot doubt, but that we should see
 “ as many *Alderman’s* Estates made in
 “ the Country, as now we do, out of
 “ all Kinds of merchandizing, in the
 “ City.—*There* are as many ways to
 “ be rich, and, which is better, there
 “ is no *Possibility* to be poor, without
 “ such Negligence, as can neither have
 “ Excuse, nor Pity.

“ As for the *Necessity* of this Art, it
 “ is evident enough; since *This* can
 “ live without all other, and no one
 “ other

“ other without *This*.—Many Nati-
 “ ons *have* lived, and some *do*, still,
 “ without any Art but *This*; And al-
 “ most All others are beholding to
 “ *This* for most of their Materials.

“ The *Innocence* is the next Thing
 “ for which I commend it; and, if
 “ Husbandmen preserve not *That*, they
 “ are much to blame; for no Men
 “ are so free from the Temptations
 “ of Iniquity.—*They* live upon an
 “ Estate, which is given them by their
 “ Mother;—*Others* upon an Estate,
 “ which is cheated from their Bre-
 “ thren: *They* live by what they can
 “ get by Industry from the Earth;
 “ *others* by what they can catch by
 “ Craft from Men.—*They* live, like
 “ Sheep, and Kine, by the Allowances
 “ of Nature; *Others*, like Wolves, and
 “ Foxes, by the Acquisitions of Ra-
 “ pine.—We are, *here*, among the
 “ vast, and noble Scenes of Nature;
 “ we

“ we are, *there*, among the pitiful
 “ Shifts of Policy.—We walk, *here*,
 “ in the Light, and open ways of the
 “ divine Bounty :—We are groping,
 “ *there*, in the dark, and confound-
 “ ing Labyrinths of human Malice :
 “ Our Senses are, *here*, feasted with
 “ the clear and genuine Taste of their
 “ Objects, which are All sophisticat-
 “ ed, *there*, and overwhelmed with
 “ their Contraries.—*Here*, Pleasure
 “ looks, like a constant, beautiful, and
 “ modest *Wife* : It is, *there*, a fickle,
 “ impudent, and painted *Harlot*.—
 “ *Here* is harmless, and cheap Plenty ;
 “ —*There*, a guilty, and expensive
 “ Luxury.

“ The *Antiquity* of this Art is cer-
 “ tainly not to be contested by any
 “ other.—The Three first Men in the
 “ World, were a *Gardiner*, a *Plow-*
 “ *man*, and a *Grazier* : It is for this
 “ Reason, I suppose, that *Ecclesiasticus*
 “ forbids

“ forbids us to hate Husbandry, *Be-*
 “ *cause*, says he, *The most High* has
 “ created it. We were All *born* to this
 “ Art, and taught by Nature to nou-
 “ rish our Bodies out of the same
 “ Earth, they were made of; and to
 “ which, at last, they must return,
 “ and pay for their Subsistence.

“ These Considerations make me
 “ fall into the Wonder, and Complaint
 “ of *Columella*, how it should come to
 “ pass, that All Arts, or Sciences, *Me-*
 “ *taphysick*, *Physick*, *Morality*, *Mathe-*
 “ *matics*, *Logick*, *Rhetorick*, nay even
 “ *Vaulting*, *Fencing*, *Dancing*, *Cooking*,
 “ *Dressing*, *Carving*, and such like *Va-*
 “ *nities*, should All have publick
 “ Schools, and Masters; and yet, that
 “ we should never see, or hear of any
 “ Man, who took upon him to pro-
 “ fess an Art so virtuous, so profitable,
 “ so honourable, and so necessary! Who
 “ is

“ is there among our Gentry, that does
 “ not entertain a *Dancing-master* for
 “ his Children, as soon as they are
 “ able to walk. But did ever any Fa-
 “ ther provide a Tutor, to instruct
 “ his Son, betimes, in the Nature,
 “ and Improvements of that Estate,
 “ which he intends to leave him?
 “ *That* is at least a Superfluity; and
 “ *This* a Defect in our manner of Edu-
 “ cation; And, therefore, I could
 “ wish, that One College, in each
 “ University, were erected, and ap-
 “ propriated to *this* Study, as well as
 “ there are to *Medicine*, and the *Civil*
 “ *Law*.

“ Almost !All the Poets, except
 “ those, who were not able to eat
 “ Bread without the Bounty of Great
 “ Men, that is, without what they
 “ could get by flattering them, have
 “ not only withdrawn themselves, from
 “ the great World, into the Happi-

B

“ nefs

“ nefs of a retired Life; but have
 “ commended, and adorned Nothing
 “ fo much, by their everliving Poems.
 “ —*Hefiod* was the firft, or fecond
 “ Poet in the World, that remains
 “ yet extant, and *He* is the firft wri-
 “ ter, too, of the Art of Husbandry,”
 &c.

Mr. *Cowley* adds a great deal more,
 which I forbear to insert; and only
 obferve, that as no Man knew Truth
 more clearly, than That Author, no
 Man could poffibly have delivered it
 more gracefully.—Honeft Mr. *Walter*
Blith is a Perfon, to whom we are
 much indebted for a free Communica-
 tion of his Knowledge in this Art:—
 He was himfelf a *Husbandman*, and
 feems but to have wanted the Addi-
 tion of a little Learning to his great
 Experience, to have made him even
 more ufeful, than he is.—He knew,
 too well, the furly Backwardnefs
 of

of most Countrymen to receive new Notions, and reproves it very sharply, in an Epistle before an excellent Piece of His, entitled the *Improver Improv'd, &c.*

“ There is, *says he*, among you a
 “ calumniating, and depraving every
 “ new Invention ; and the most guilty
 “ of this are your mouldy, old leaven’d
 “ *Husbandmen*, who Themselves, and
 “ their Forefathers, have been accus-
 “ tom’d to such a course of Husban-
 “ dry, as they *will* follow, and no
 “ other. Their Resolution is so fix’d,
 “ that no Issues, or Events shall change
 “ them : If their Neighbour has as
 “ much Corn on *one* Acre, as they
 “ from *two*, upon the same Land, yet,
 “ so he *will* continue : Or, if an Im-
 “ provement be offered to him, and
 “ all his Neighbours, he’ll oppose it,
 “ and degrade it : What, forsooth,
 “ says he, who taught you more Wit,
 B 2 “ than

“ than your Forefathers ? Would
 “ *They* have neglected this Advantage,
 “ had there been any ? and I know
 “ not what simple Chaff, to blind
 “ themselves.—This proud, unteach-
 “ able Spirit an ingenuous Man ab-
 “ hors, which banes and poisons the
 “ very Plenty of our Nation.—These
 “ Prejudices both upon your Minds,
 “ and Practices, which bolt you out
 “ from Wealth, and Glory, my dear
 “ Friends, and Fellow-Husbandmen,
 “ I pray you, lay aside, and do but
 “ walk with me in Charity through
 “ this Discourse, and I doubt not to
 “ convince you,” &c.

The same good Man, in another Place,
tells us—

“ To multiply more *Scripture*, where
 “ all *Experience* makes it clear, is but
 “ to prove a Principle ungain-said.—
 “ The *Usefulness* of it is no less, than
 “ the Maintenance of our Lives, our
 “ Estates,

“ Estates, the Kingdom, and the
 “ whole World : Nay, the Advance-
 “ ment of the Fruits, and Profits of
 “ the Earth, by Ingenuity, is little
 “ less, than the Addition of a *new*
 “ *World* : All other Callings proceeded
 “ hence ; the *Merchant* is a gallant
 “ Servant to the State, He fetches it
 “ from far, and ’tis a great Inrich-
 “ ment to the Nation : But he pur-
 “ chases from others ; He raises it not
 “ from *Nothing*, but parts with good
 “ Silver, or Gold, or some other Equi-
 “ valent for it ; But This *Merchant in*
 “ *Husbandry*, raises it from the Earth ;
 “ which, were it not for his Industry,
 “ would neither yield, nor discover
 “ its Riches : And what parts he with ?
 “ At what Rate does he purchase ?
 “ why truly with the Wages of those
 “ very Poor, maintained in Labour,
 “ who must be, else, at the same Charge,
 “ maintain’d in Idleness : Oh ! the

“ Excellency, Antiquity, and Useful-
 “ fulness of this noble Art ! First, re-
 “ member your Service to God, and
 “ let all the rest of your Application
 “ be pour’d out upon Husbandry,
 “ accounting *That* the second Thing
 “ necessary.—*A Blessing is upon the*
 “ *Head of Him, that tilleth Corn ; and*
 “ *the Thoughts of the Diligent shall bring*
 “ *Abundance.*” *Improver Improved*, p.
 4, and 5.

What the Skill of this Author enabled
him to do, and teach others, may be
best seen by his own Examples.—

“ As for boggy Lands, says he, in
 “ *Page 26, of the same Book*, I have
 “ recovered several Pieces next to plain
 “ Quagmires ; The means of doing
 “ which you have been taught in the
 “ last Chapter ; so bad, and so boggy,
 “ that no Cattle could tread upon it,
 “ but they were lost ; and yet, I re-
 “ covered it, by this Course, to per-
 “ fect

“ fect Soundness, and made it worth
 “ thirty, and forty Shillings an Acre;
 “ And the like I dare undertake in
 “ any such Lands whatever.

Again, Page 102.—“ I once held a
 “ Piece of Land, full of your soft
 “ Rushes, as high as any ordinary
 “ Beast, and very wet: I conceived it
 “ not able to bear Barley, ’twas so
 “ weak, and barren, so cold, and
 “ queasy; and the Neighbours, very
 “ able Husbandmen, so discouraged
 “ me, that they desired me to forbear
 “ Tilling it; yet I, resolving to make
 “ a full Tryal, set upon it, according
 “ to the Rules just now given you:
 “ and, for the first Crop, which was
 “ but of Oats, I could have had Six
 “ Pounds an Acre, being offered it
 “ by an Oatmeal-Man, unasked, as it
 “ stood upon the Ground.”

Page 133.—*Speaking of the right Art
 of liming Ground, he says,* “ —whole

“ Countries, and as many Counties,
 “ that were naturally, as barren, as
 “ any in the Nation, have upon Land,
 “ not worth a Shilling an Acre, raised
 “ after such a Liming, as good Wheat,
 “ Barley, white, and grey Pease, as
 “ *England* yields; yea, they will take
 “ a Parcel of Land from off a Lingy
 “ Heath, or Common, not worth the
 “ having; Nay, many will not have
 “ it, if they might; and raise as gal-
 “ lant Corn, as any whatsoever, worth
 “ five, or six Pounds an Acre.”

In another Place he describes the
 Nature, and Benefit of *Marle*, and,
 endeavouring to persuade a more ge-
 neral Search after it, he gives this
 Instance of its Excellence.

“ Upon a hard, enclos’d, woodland
 “ Farm I rented, I had about fifteen
 “ or sixteen little short Lands, which
 “ were so gravelly of Nature, that
 “ there was but two Inches of Earth,
 “ before

“ before you came to as perfect Gra-
 “ vel, as any *Highway* ; nay, ’twas so
 “ exceeding barren, that it turned, in
 “ many Places, to *Cinder*, like the
 “ Corruption of Coals, Iron, and Fire
 “ congeal’d, which the *Smith* throws
 “ out of his Forge : However, resolv-
 “ ing to make an Experiment, I search-
 “ ed for *Marle*, and found it, where
 “ none had ever been known in the
 “ Memory of Man, nor within many
 “ Miles of it : I imagined, it might lie
 “ in an old strong, *Clay Pool*, which I
 “ cleans’d, and succeeded :—And, be-
 “ cause I would make an undeceivable
 “ Experiment, I carried out the Mud,
 “ which I took from the Pool, and
 “ with That covered two Lands ; I
 “ dung’d two more, and two I Sheep-
 “ folded : I marled Three or Four,
 “ and one I neither folded, dung’d,
 “ marl’d, nor mudded ;—yet Plowed
 “ them all alike, and Sowed them with

" Wheat.—From my marled Land
 " I reaped most incomparable Corn ;
 " from the rest very good, except the
 " Land, on which I laid nothing ;
 " and, from That, I reaped nothing,
 " no not so much as Straw, though I
 " had given it the same Seed, and the
 " same Tillage, as I gave the Rest.—
 " The next Year I sowed Barley ; the
 " marl'd Land produced extremely ;
 " the others began to decay, and,
 " from the unmanured Spot, which
 " had this Year been sown with Oats,
 " I could not reap so much as a single
 " Stalk.—The Third Year I marl'd
 " the unfruitful Piece, and then, That,
 " which could bring forth Nothing
 " the two former Years, produced as
 " fine a Crop of Corn, as ever was
 " seen ; and continued to yield most
 " plentiful Harvests, for twelve or
 " fourteen Years together, without
 " any other Addition of Dung, Soil,
 " or

“ or the least Compost whatsoever.”—
Improver Improv'd, P. 137.

He afterwards tells us, p. 164, of a Gentleman, “ who had, by Accident, “ while a Boy, planted a hundred “ Ashes about his Father’s Grounds, “ which very Trees He afterwards “ sold for five hundred Pounds:”— This is yet exceeded by his other Relation of a Merchant, “ who planted so “ much Wood in his own Life Time, “ as he refus’d fifty thousand Pounds “ for the Purchase of.”

He goes on with a pretty Story of a poor Woman, “ whose whole Estate “ was a little Slip of garden Ground, “ with an Ash or two in the Hedge “ of it.—A strong Autumnal Wind “ blew all the Ashen keys about her “ Garden ; so that, in the Spring, “ ’twas metamorphos’d into a hopeful Plantation, with the Plants above “ Ground, as green as a Leek.—

“ The Woman was religious enough
 “ to cherish her new Progeny ;
 “ and however loth to lose her
 “ Garden, resolved, at last, to let
 “ them grow.—She did it ; and,
 “ having such a promising Nursery,
 “ became a Planter, and by selling
 “ Setts about the Country, obtained a
 “ very handsome, and enlarged Live-
 “ lyhood.”—Page 170.

The same Author, speaking of Clover,
 Page 186, says, that “ what stands you
 “ the first Year, in twenty or five and
 “ twenty Shillings an Acre, and, after
 “ That, in not above Ten Shillings a
 “ Year, *which he supposes the Rent of the*
 “ Land, will produce Six, Eight, or
 “ Ten, nay Twelve Pound per An-
 “ num for every Acre. *And speaking*
 “ of Orchards, he says, I know many
 “ growing upon Land, that was not
 “ worth Six Shillings an Acre when
 “ they began the Work ; and *That*
 “ some

“ some Thousands of Acres, too ;
 “ which Land is, now, brought to that
 “ Improvement, that they make twen-
 “ ty Pounds an Acre ; nay, if I should
 “ say forty, or fifty Pounds, I should
 “ find sufficient Testimony for the
 “ Truth of it.” *Page 166.*

Mr. *Mortimer*, a very ingenious Gentleman, as appears by his Writings, some few Years since, publish'd a Treatise on our Subject, dedicated to the *Royal Society*, of which he was himself a Member, wherein he gives Evidence for us, in these Words.

“ Though Agriculture is what some
 “ may have a slight Opinion of, yet,
 “ 'tis one of those Arts, to the Teach-
 “ ers whereof Dr. *Sprat*, now *Bishop*
 “ of *Rocheſter*, ſays, the Antients paid
 “ the Diviner ſort of Honour : And
 “ though the Zeal, by which they ex-
 “ preſſed their Gratitude, to ſuch Be-
 “ nefactors, degenerated into Super-
 “ ſtition,

“ stition, yet has it taught us, that a
 “ higher Degree of Reputation is due
 “ to the Discoverers of profitable Arts,
 “ than to the Teachers of speculative
 “ Doctrines, or, to Conquerors Them-
 “ selves. But I need say little, either
 “ of the Antiquity, or Usefulness of
 “ Husbandry, since so many great,
 “ and learned Men have thought it
 “ worth their Study, and Commenda-
 “ tion. And that the Advantages of
 “ it reach all Parts, and Persons, in
 “ the World ; so that there can be No-
 “ thing more universally good, nor,
 “ consequently, better deserve your
 “ honourable Protection.”

Mortimer's Art of Husbandry.

In Page the 97th of this Author's
Book we are told, that “ in Cumberland,
 “ a small Parcel of Ground, of two
 “ Acres and a half, is lett for Eleven
 “ Pound per Annum ; and that the
 “ emptying the Town *Tan-pits* on it,
 “ is

“ is the only Means, by which it has
 “ been raised to that value.”

*One Mr. John Edmunds, of Bowden in Cheshire, has given the following Account of improving his Ground by Sand only ;—His Land, he says, was “ marsh
 “ Land, very flat, and full of Rushes;
 “ of a black, deep Mould, such, as
 “ they dig Turf in: Upon which
 “ Land he laid after the Rate of 300
 “ Load of Sand upon an Acre:—
 “ The Sand was red, hot, and of a
 “ small Grain; He sowed it, first, with
 “ Oats and Fitches, and had an ex-
 “ traordinary Crop: The next Winter
 “ he dung’d it well, and had, the
 “ Summer after, fourteen Loads of
 “ Hay upon an Acre.—”Tis now, he
 “ says, twenty-four Years since he
 “ sanded it, and he has not dung’d it
 “ since; And the Land, that before
 “ was not worth ten Shillings an
 “ Acre, He can now let for Six Pound,
 “ and*

“ and could have two Crops upon it
 “ every Year, if he could be sure of
 “ fair Weather to make it in.” *Mort.*
of Husbandry, Vol. 2d. P. 17.

Liebault, the Author of a French Fo-
lio, entitled, The Country Farm, address-
ing himself to the Prince of Soyons, tells
him—“ among all the Sciences, which
 “ Man can possibly attain, by Practice,
 “ or by Speculation, there is none so
 “ elevated, or so ravishing to human
 “ Sense, as That of Husbandry : Nei-
 “ ther is there any Study, so delightful,
 “ so profitable, or so necessary for the
 “ very well-being of Mankind in ge-
 “ neral.”

“ There is nothing wanting, *says*
 “ *Mr. Gabriel Platt, in an excellent*
 “ *Traët, which he calls, A Discovery of*
 “ *hidden Treasure,* but willing Minds,
 “ to make this Country the Paradise
 “ of the World.—If Gentlemen of
 “ Quality would but lay the first Stone,
 “ All

“ All would follow without Question :
 “ For *Gain*, the Loadstone of the
 “ World, being once laid open by
 “ Practice, would *draw* the Rest, in-
 “ fallibly.—There is no Cause, that
 “ I know of, for their being slack in
 “ it. There are a great number of
 “ Parishes within my Knowledge ;
 “ and without Question, infinitely
 “ more, that I know not, where a
 “ Landlord, by laying out a very lit-
 “ tle Money, upon his Estate, may gain
 “ as much again, as he would by pur-
 “ chasing new Lands, though the
 “ Purchase-Money were to be given
 “ him. And this Business is not to
 “ be slightly thought upon, for as
 “ much as Husbandry is the very
 “ Nerve, or Sinew that holds together
 “ all the Joints of a Monarchy.”

The same Author, Page 32—“ I have
 “ known, in *England*, Hay Ground
 “ improved, by this means, from ten
 “ Shil-

“ Shillings, to above ten Pound an
 “ Acre.—*Again.*—I know a Man,
 “ not far from *London*, who, by lay-
 “ ing out three hundred Shillings, im-
 “ proved his Estate three hundred
 “ Pounds a Year.”

In another Place, p. 63.—“ Where-
 “ by it appears of what high Conse-
 “ quence Husbandry is in a Nation ;
 “ viz. the very Legs, and Pillars of it,
 “ without which it cannot stand ; no,
 “ not by any Device, or Policy what-
 “ soever.—And, therefore, I would
 “ have every Well-wisher to the Pub-
 “ lick-Good, be diligent in the fur-
 “ therance of it : And read *Mr. Mark-*
 “ *ham, Googe, Tuffer, Sir Hugh Platt,*
 “ and others, who have manifested
 “ their good-will, by publishing their
 “ Knowledge in this Behalf : I would
 “ desire, that no Man may think much
 “ of his Labour, but try Experiments
 “ of this Nature, whose Effect *must*
 “ prove

“ prove beneficial to all present, and
 “ future.—But, if any Man be wil-
 “ fully negligent in this Duty, he
 “ manifests his Unworthiness to all
 “ Posterity.—Admit he be accounted
 “ a conceited Fellow, or One, that
 “ runs out of the common Way ; yet,
 “ in Regard the common Way leads
 “ to Perdition, let him not desist for
 “ a few frivolous Aspersions : For,
 “ when Light and Truth shall appear
 “ in the World, his Worth shall shine
 “ out, beyond a Possibility of being
 “ eclipsed, by the Tongues of con-
 “ ceited Fools, and idle Coxcombs.”

A little further, he adds—“ I wish,
 “ that They, who love not to try
 “ Experiments, may take their Ease,
 “ and will lay no heavier Task upon
 “ them, than to wish well to others ;
 “ only, I would desire them to confi-
 “ der, what a wretched Case They
 “ had themselves been in, if some
 “ more

“ more inventive Brains had not found
 “ out the *Plow*, and the Use thereof :
 “ As also, if some, of a like Disposi-
 “ tion, had not discovered new ways
 “ for the fructifying of Land, when
 “ its worn Condition refused Encrease,
 “ sufficient to sustain the numerous
 “ People.”

Discovery of hidden Treasure, p. 86.

I happened just now to mention
 the *Royal Society*, Let us see the Opi-
 nion of one of its worthiest Members,
 the elaborate Mr. *Evelyn*, in his *Sylva*.

“ This Discourse, *says he*, was deli-
 “ vered to the *Royal Society*, in Obedi-
 “ ence to their Commands, and is
 “ only for the Encouragement of an
 “ Industry, and worthy Labour, too
 “ much, in our Days, neglected ; as
 “ haply reputed a Consideration of
 “ too sordid, and vulgar a Nature for
 “ noble Persons, and Gentlemen to
 “ busy themselves withal ; and who
 “ oftner

“ oftner find ways to fell down, and
 “ destroy, than repair or improve :
 “ But we are not without Hopes of
 “ taking off these Prejudices, and of
 “ reconciling them to a Subject, and
 “ an Industry, which has been con-
 “ secrated, as I may say, by as good,
 “ and as great Persons, as any the
 “ World has produced ; and whose
 “ Names we find mingled among
 “ Kings, and Philosophers, grave Se-
 “ nators, and Patriots of their Coun-
 “ try :—For such, of old, were So-
 “ lomon, Cyrus, and Numa, Licinius,
 “ surnamed Stolo, Cato, and Cincin-
 “ natus ; the Pisos, Fabii, Cicero, the
 “ Plinies, and Thousands more, whom
 “ I might enumerate, who disdained
 “ not to cultivate these Rusticities,
 “ even with their own Hands ; and
 “ to esteem it a great Accession, to
 “ dignify their Persons, and adorn
 “ their Purple, with these rural Chà-
 I “ racters

“ racters of their Affections to Plant-
 “ ing, and Love of *Agriculture*; which
 “ has transmitted to us their venerable
 “ Names through so many Ages, and
 “ Vicissitudes of the World. That
 “ famous Answer alone, which the
 “ *Persian* Monarch gave to *Lysander*,
 “ will sufficiently justify what I have
 “ said; Besides That, which we might
 “ add out of the Writings, and Ex-
 “ amples of the Rest.—But I hasten
 “ to advise Men not to commit them-
 “ selves to the Dictates of their igno-
 “ rant Servants, who are, generally
 “ speaking, far fitter to learn, than
 “ instruct others.—*Male agitur cum*
 “ *Domino, quem Villicus docet*, was an
 “ old Observation of *Cato's*; and *Is-*
 “ *chomachus* told *Socrates*, that it was
 “ far easier to *make*, than to *find* a good
 “ Husbandman.—I have often prov'd
 “ it so, in *Gardeners*; and, I believe, it
 “ will hold in most of our Country Em-
 “ ploy-

“ ployments : We are to exact Labour
 “ from *them*, not Conduct, and Rea-
 “ son : This Business is a *Science*, and
 “ beyond the Reach of their shallow
 “ Capacities ; on the contrary, as the
 “ *Orator* has expressed it, there is no-
 “ thing more becoming, or more wor-
 “ thy of a *Gentleman*.—The true Rea-
 “ son, *says Palissy*, a *French* Writer,
 “ why Husbandry is no more improv-
 “ ed in this Age of ours, is, that, when
 “ Men have acquired any considerable
 “ Fortune, by their good Husbandry,
 “ and Experience, forgetting that the
 “ greatest Patriarchs, Princes, their
 “ Sons and their Daughters, belong-
 “ ed to the Plow, and the Flock, they
 “ account it a Shame to breed up
 “ their Children in the same Calling,
 “ to which they themselves were edu-
 “ cated ; They must be presently made
 “ Gentlemen ; They must, forsooth,
 “ have a Coat of Arms, and live up-
 “ on

“ on the Rents of their Estates ; so
 “ as by that Time his Beard grows,
 “ he begins to be ashamed of his Fa-
 “ ther, and is ready to defy the Man,
 “ who, at any Time, reminds him of
 “ his honest Extraction : If it chance,
 “ the good Man has other Children to
 “ provide for, *This* must be the Darl-
 “ ing ; be bred at School, and Uni-
 “ versity, while All the rest must to
 “ plow with their Father.—This is
 “ the Cause, that our Lands are so
 “ ill cultivated : Every body will sub-
 “ sist upon their own Revenue, and
 “ take their Pleasure, while their
 “ Estates are resign’d to the Manage-
 “ ment of the most ignorant ; which
 “ are, either the Children kept at home,
 “ as I said before, without Learning
 “ or Experience ; or *Hinds*, if possible,
 “ more ignorant than They ; when,
 “ as in Truth, and Reason, the more
 “ Learning, the better Philosophers,
 “ and

“ and the greater Abilities they possess, the more, and the better are they qualified, to cultivate, and improve their Estates.”

The same Author, p. 219.—“ Whatsoever is proposed to our Husbandmen, above their usual Course, is looked upon, as the Whim, and Fancy, of speculative Persons, which they turn into *Ridicule*, when applied to Action: and this, says an ingenious and excellent Husband, might be the Reason, why the prime Writers of all Ages, endeavour’d to involve their Discourses with Allegories, and enigmatical Terms, to protect them from the Contempt, and Pollution of the Vulgar; which has been of some ill Consequence in Husbandry, and made the fewer Writers adventure upon so plain a Subject, though, doubtless, to any considering Person, the most delightful

C

“ lightful Kind of natural Philoso-
 “ phy ; and that which employs the
 “ most useful Part of the *Mathema-*
 “ *ticks.*”

*A little further, you have a Specimen
 of the Profits of the Art, in one of its
 Branches, Planting only.—“ Even this
 “ Improvement, says he, speaking of
 “ one foregoing, does no Way reach
 “ what I have met withal, in the most
 “ accurate, and no less laborious Cal-
 “ culation of Capt. Smith, upon this
 “ very Topic ; where he demonstratively
 “ asserts, that a thousand Acres of
 “ Land, planted at one foot Interval,
 “ in seven thousand two hundred and
 “ one Rows, taking up fifty one mil-
 “ lion, eight hundred, and fifty four
 “ thousand, four hundred, and one
 “ Plants of Oak, Ash and Chesnut, and
 “ fit to be transplanted at Three years
 “ End, are then worth Eighteen Pence
 “ a hundred, besides the Chesnuts,
 “ which,*

“ which, being a Third of the whole,
 “ and worth half a Crown a hundred,
 “ the Three years Profit of one Thou-
 “ sand Acres, amounts to forty seven
 “ thousand, five hundred, and thirty
 “ three Pounds four Shillings.” *Sylva*,
 p. 221.

Will you hear the Sentiments of an honest Surveyor, whose Business made him the more capable of observing the universal Ignorance of Agriculture, which reigns among us?—“ We have, indeed, *says he*, a kind of plodding, and
 “ common Course of Husbandry, and
 “ a kind of peevish Imitation of the
 “ *most*, who, as wise Men note, are
 “ always the *worst* Husbands; and
 “ who only try what the Earth will
 “ do itself, and endeavour not to help
 “ her, by the means which Nature has
 “ provided; whereas, if Men were
 “ but a little careful, and industrious,
 “ the Earth would always yield above
 “ a hundred per Cent. Reward for a

“good Husband's Charges, without
“the Curses of corroding Usury.”

Surveyor's Dialogue, P. 223.

The next Witness shall be Mr. GOOGE
——“Do you wonder, *says he*, to see
“me delight myself in the Raptures
“of so honest, so profitable a Life, as
“that of a Husbandman. Do you
“not know, that, in the Judgment
“of the holiest, and wisest Men, there
“is nothing more eligible, nothing
“more illustrious? Neither is there
“any Life besides, so fit for a Gen-
“tleman, nor any other Profession
“so acceptable to God.—The Anti-
“ents, I appeal to *Cato*, when they
“would raise Commendation to its
“highest Pitch, would call a Man
“*Good Husband*, as comprehending, in
“that Name, the utmost Praise they
“could give him.”

Googe of Husbandry, p. 5.

Again.

Again. “ The only Gentlemanlike
 “ way of growing rich, is by the Art
 “ of Husbandry: All other Professions
 “ have something in them of the *mean*,
 “ and *subservient*: This alone is free,
 “ and noble; and the Wealth thus
 “ gotten may almost be said to be of
 “ a Man’s own *creating*.—Country
 “ People were, in all Ages, preferred
 “ before the Inhabitants of Cities, as
 “ having more Nobility affixed to their
 “ Practice, than such as, living secure-
 “ ly within Walls, were safe, and idle
 “ under the Shadow of a Pent-house.
 “ —How much less noble is the Man,
 “ who sells his Blood, not for the Ser-
 “ vice, but the *Pay* of his Country!
 “ and how far below the Countryman
 “ must He be placed, who bawls at
 “ every Bar for Gain! and holds out
 “ his Hand to every Bidder!” P. 8.

*Mr. Gabriel Platt, in a Letter to Mr.
 Samuel Hartlibb, which is printed in a*

Discourse on this Subject, observes, That
 —“ It is found by Experience, that
 “ where a good Council of War is,
 “ there a Camp is well defended; and
 “ where a good *Physician*, the Diseases
 “ of human Body are less fatal.—Why
 “ should it not be so in Husbandry?
 “ *says he.*—And does not that Art de-
 “ serve an *Academy*, upon which the
 “ Happiness of all Kingdoms does de-
 “ pend? Surely, if a certain Number
 “ of the most experienced Men were
 “ deputed for this Purpose, who might
 “ regulate the rest, it would produce a
 “ great Perfection in that Knowledge,
 “ which, as it is the most antient of
 “ all Sciences, so it is the most excel-
 “ lent, and honourable; for by it all
 “ Princes live; and no Man can pos-
 “ sibly live without it.—The Rabble
 “ are like those in *Ireland*, who will
 “ not lay aside their old Custom of
 “ drawing Horses by their Tails, tho’
 “ a

“ a solemn Law be made against it.
 “ —I have known some Parsons of
 “ Parishes pretty skilful in Agricul-
 “ ture, and excellent Improvers of
 “ Land : And I have, now and then,
 “ met with a *Landlord* qualified with
 “ the same Skill : And certainly, if all
 “ were so, it would conduce greatly
 “ to the Prosperity of a Kingdom,
 “ tho’ the chief Profit would redound
 “ to the two particular Ranks of Men,
 “ above named. I have known many
 “ Men live better with thirty Acres of
 “ Land, than others could upon a
 “ hundred ; and, if need require, I
 “ can shew, where *One* Acre of Land
 “ is worth two hundred Pound a Year,
 “ and a whole Family has not only
 “ lived well, but gathered a good
 “ round Sum out of it.”

Annotations on the Legacy, P. 205, 206.

*A Discourse, which was printed soon
 after the Restoration, under the Name of*
 MERCURIUS LÆTIFICANS, *has, among*

other Observations, this Hint towards our Subject :—“ Let all Men be pleased
 “ to take into serious Consideration
 “ that, as in every Century of Years,
 “ there do more Men die than are in
 “ the World, at any one Time ; so
 “ also, in every Century, there is more
 “ Wealth lost to the Nation, for want
 “ of a compleat Knowledge in the Art
 “ of Agriculture, than there is in the
 “ Kingdom, at any one Time, though
 “ an Inventory were taken at *Michael-*
 “ *mas*, when the whole Year’s Fruits
 “ are engrossed together ; and yet such
 “ an Inventory will much more than
 “ double another, which should be
 “ taken at *May-day*, when the old Fruits
 “ are almost wasted, and little remains,
 “ but *Hopes* ; which are not usually
 “ put into Inventories.”

A Complaint, of our particular Deficiencies, in this Art, which bears the Name of Mr. CRESSY DIMOCK, after having recommended to the Husbandmen
serve-

several Practices, which are still un-introduced among us, reproves the general Backwardness he met with in this manner.

“ But some will object, that they
 “ will not grow here with us : Our
 “ Forefathers never used them. To
 “ those I reply, and ask them, how
 “ do they know ? have they tried ?—
 “ Idleness never wants an Excuse :
 “ And why might not our Ancestors,
 “ upon the same Ground, have held
 “ their Hands in their Pockets, and
 “ presumed, that Wheat, and Barley
 “ would not have grown amongst us ?
 “ or, why should they not have been
 “ discouraged from planting *Cherries,*
 “ *Hops, Liquorice, Potatoes, Apricots,*
 “ and *Peaches* ? And from sowing
 “ *Rapeseed, Colliflowers, Great Clover,*
 “ *Canary-seeds,* and many more of this
 “ Kind ? And yet we know, that some
 “ of these have been introduced, and
 “ most of them brought to Perfection,
 “ even in our Days.”

Will you have another Example of what Land is capable of doing?—“ A Friend
 “ of mine, *says Mr. Platt*, about *Mi-*
 “ *chaelmas*, plowed up twenty Acres
 “ of Grass Ground : He afterwards
 “ cross-plow’d it, and harrow’d it three
 “ or four times, to kill the Grass, and
 “ mingle the fat Earth with the lean ;
 “ He sowed it, about the Beginning
 “ of *March*, with Barley, which be-
 “ fore the vehement Drought came,
 “ had, as it were, turfed the Ground
 “ with its Spires, it came up so
 “ thick : So that the Drought, which
 “ spoiled the thin, and common Corn
 “ in the barren Fields, could only
 “ shorten the Stalk of this Barley ;
 “ while the rich Earth put forth a
 “ large, and thick Ear, with plump,
 “ and round Grain ; by which means
 “ it came to pass, that he had, upon
 “ every Acre, thirty Quarters of Bar-
 “ ley ; and, the Price being raised
 “ that

“ that Year by the Drought above-
 “ mentioned, he sold it off for forty
 “ Shillings a Quarter ; and, in the
 “ Face of a thousand unbelieving Ig-
 “ norants, received twelve hundred
 “ Pounds for twenty Acres of Barley.”

Annotat. Page 187.

*You will wonder to hear of such a
 Harvest : Let the same Author plead his
 own Cause ; and indeed, he is very able
 to do it.—“ If any Man, says he, asks,
 “ why this great Improvement of our
 “ Lands is hardly followed by any one
 “ Man in the Nation ? The Answer
 “ is very easy.—Few there are, who
 “ understand these ways, and fewer
 “ far will give themselves the Trou-
 “ ble of thinking to the Purpose : All
 “ Men are, from their Youth, brought
 “ up to Idleness, or Business : If to
 “ Idleness, who can expect a good
 “ Effect from so bad a Cause ? And,
 “ if to Business, they are so fixed, so*

“ rivetted in their particular Way,
 “ before they become Masters of a
 “ Discretion capable of chusing, that
 “ they cannot wind themselves out of
 “ those former Engagements, which
 “ afford them a *certain* little Profit,
 “ for an *uncertain* great One : At least
 “ for One, which they imagine not
 “ *so* certain, as their own : Besides,
 “ Men are commonly possessed with a
 “ sturdy Dislike of any Proposition,
 “ which, to set them *right*, must first
 “ convince them, that their former
 “ Measures have been *wrong*.” *Annot.*
P. 278.

“ Some, *says the same Gentleman, in*
 “ *another Place*, may object, that if
 “ this Art, Trade, or Profession of
 “ Husbandry were, indeed, so profit-
 “ able as you pretend, why do we not
 “ then see more *rich* Men of that sort ?
 “ And why do so many Farmers live
 “ so poorly, and so beggarly, that one
 “ might

" might as well take them for their
 " Landlord's *Slaves*, as for his *Tenants*?
 " I answer, that this Presumption is,
 " in itself, a downright Mistake; for
 " there are, many times over, more
 " Estates acquired, by what you call
 " plain *Farming*, than by any other
 " Profession in the Nation: Nay, the
 " best, and noblest Families amongst
 " us have been raised by the *Plow*:
 " And there are, at this Time, Mul-
 " titudes of *Graziers*, *Sheep-masters*,
 " and *Corn-masters*, who, by their per-
 " sonal Industry, in this Art, have ac-
 " quired such vast Estates, that, were
 " the Worth of Mankind to be dis-
 " puted, by the Weight of their Bags,
 " They could produce their *Thousands*,
 " and their *Ten Thousands*, in as for-
 " midable Array, as if they had been
 " used to appear at the Head of our
 " City Militia.

" But

“ But, allowing the Position *just*, it
 “ touches not the *Art*; The Fault is
 “ in the *Professor*, not the *Profession*:
 “ Our *Farmers* (for to call them *Hus-*
 “ *bandmen* were to flatter them with
 “ a Title they have no Pretence to)
 “ have only certain, general, rude,
 “ imperfect, and irrational Rules, or
 “ Customs rather, which their Fore-
 “ fathers, just as wise as They, have
 “ left them; and from which, like a
 “ dull Ass, who is so fond of his natu-
 “ ral Pace, they can never be driven:
 “ Nay, they are so ridiculously averse
 “ to all *new* Practices, that 'tis a meer
 “ Impossibility to infuse any such Thing
 “ into their Heads; no, not by ma-
 “ nifest Example under their very
 “ Noses.—The Stubbornness of these
 “ Men's Natures is easily discovered by
 “ any Man, who will but propose
 “ some means, to turn their *barren*
 “ *Land* into *fruitful*, or prevent the
Rot

“ *Rot* among their *Sheep*, or *Murrain*
 “ among their *Cattle*. He will not
 “ only see his Motion utterly rejected,
 “ but Himself derided, and privately
 “ scoffed at: But Ignorance was, ne-
 “ ver yet, a wise Man’s Ruler.—Be
 “ not easily diverted from experienc-
 “ ing the Truth, and be assured, that
 “ He, who, having any tolerable Stock
 “ to begin with, does first inform him-
 “ self with Care, and then proceed
 “ with Resolution, cannot fail to be
 “ as rich, as he desires; and *that* with
 “ an Honesty, the Consciousness
 “ whereof will add a Relish to his
 “ Pleasures.” Page 265, 266.

In the Papers, which were publish-
 ed by Mr. HOUGHTON, a Fellow of
 the ROYAL SOCIETY, under the Title
 of *Letters for the Improvement of Hus-*
bandry, and Trade, we have much
 matter for our Purpose, of which I
 will only give you a few Particulars.

—In

—In *Vol. I. p. 16.* we have the following Letter.

“ SIR,

“ I am very glad, you have undertaken this Task, and question not
 “ but, in a little Time, the Kingdom
 “ will have Reason to thank you.—
 “ For my Part, I do ; as well foreseeing the Advantages, which must attend it.—In Answer to your Inquiries about *Meadow, Number 4,* I’ll
 “ tell you what Success I had by *Clover.*

“ I have a Piece of Land, that
 “ used to be reckoned eight Acres ; it
 “ was a common Field, and usually
 “ lett, by my Predecessor, for Three
 “ Pound a Year. This I enclosed
 “ two Sides of, the other two Sides
 “ lying to other Enclosure, and being
 “ done to my Hand.—I made a Ditch
 “ five Feet deep, and six or seven Feet
 broad ;

“ broad ; the Earth that was thrown
 “ up, I carried off, and laid it on my
 “ Land, which both improved my
 “ Ground, and prevented the Rabble
 “ from taking the first Opportunity
 “ to fill up my Ditch again.—I pre-
 “ pared this Land, as is usually done
 “ for *Oats*, and *Clover-grass*, both
 “ which I sowed, and all my Charge
 “ amounted to about seventeen Pound :
 “ And, *that Year*, I made above twen-
 “ ty Pound of it. Next Year, with-
 “ out any further Charge, it cleared
 “ me forty Pounds,” &c.

“ Several of my Neighbours have
 “ found great Advantage by this, and
 “ several other new Husbandries, of
 “ which, hereafter, I may give you a
 “ particular Account : Interim sub-
 “ scribe, &c.”

“ SIR,

“ SIR,

“ Since I have been acquainted with
 “ your excellent Design of promoting
 “ the Husbandry of *England*, as much
 “ as in you lies, I’ll tell you what I
 “ met with, in a little Journey to
 “ *Theobalds*.

“ There is a considerable Gentle-
 “ man, who has enclosed a Piece of
 “ Ground, containing six Acres :
 “ This he plowed, and ordered as for
 “ Wheat; and about *Midsummer*,
 “ sowed it with *Cole-feed* : He had a
 “ hundred *Welch* Ewes, which he
 “ would have sold to the Butchers, but
 “ they would give no more than half
 “ a Crown a piece for them.—Up-
 “ on this, about the Beginning of *No-*
 “ *vember*, he put them into his *Cole-*
 “ *worts*; They happened All to cast
 “ their Lambs, before *Christmas*; some
 “ a Month before.—The Coleworts
 fed

“ fed the Ewes fo well, that the
 “ Lambs were fold off, from eight to
 “ fourteen Shillings a piece.—When
 “ the Growth was eaten up clean, he
 “ fold the hundred Ewes for a hun-
 “ dred Crowns; and then prepared
 “ his Land for *Oats*; which he fow’d,
 “ and receiv’d, from each Acre, eight
 “ Quarters: And all This loft him no
 “ more Time, than would have been
 “ neceffary for a Crop of *Wheat*.

“ This is no Romance, I had it
 “ from the Gentleman’s own Mouth,
 “ more than once, and his Neigh-
 “ bours all own it: I hope this Ex-
 “ ample will encourage others to the
 “ like Endeavours, and am, &c.”
Houghton of Husbandry and Trade, Vol.
 I. p. 18.

Another Letter, figned ADAM MAR-
 TINDALE, gives the following Ac-
 count of the Advantage, which cer-
 tain

tain Gentlemen, of *Cheshire*, made by *Marling* of their barren Lands.

“ As to the *Profit*, I dare not tell
 “ Strangers what my Neighbours
 “ know to be true, it has sometimes
 “ been so extraordinary: I shall only
 “ say, that, if the Marl be good, and
 “ the Land proper for it, good Hus-
 “ bands affirm, that the Expence can
 “ hardly be too much. I know some-
 “ what by my own Experience; but
 “ I can name divers of my Acquaint-
 “ ances, who have very considerably
 “ advanced themselves in the World,
 “ this way; And others, who, by
 “ this Means, have supported them-
 “ selves, and their Families, from
 “ Ruin, whose Estates had been, other-
 “ wise, sunk, by their former Prodi-
 “ galities.—*Vol. I. p. 58.*

What follows is a Letter from Dr.
Plott, Author of the *natural History of*
Oxfordshire, &c.

“ SIR,

“ SIR,

“ I have perused your printed Col-
 “ lection of Letters, which you tell
 “ us, in your Preface to Dr. B, shall
 “ be frequently published ; whereof,
 “ I must confess, I am not a little
 “ glad : And it is my Opinion, that
 “ the maintaining a *Georgical*, and
 “ *trading* Correspondence——The
 “ Publication of Letters, foreign,
 “ and domestick ;——And the Bre-
 “ viates of Books agreeable to such
 “ Matters, will be a Means to make
 “ *England*, not only the most delight-
 “ ful, but also the wealthiest King-
 “ dom, the World is acquainted with.

“ I cannot, therefore, but applaud
 “ your Design:——Proceed, as the
 “ Countryman says, and prosper, in
 “ the name of God.—And, to satisfy
 “ you, that my good Wishes, towards
 “ you herein, are cordial, I do here-
 “ by

“ by promise you my utmost Assist-
 “ ance for the Publick Good ; *Agri-*
 “ *culture*, I think, being the *least*
 “ improved, of all the Arts in the
 “ Kingdom, though it *best* deserves it,
 “ as the most universally Beneficial.

“ For, whatever Husbandmen are
 “ apt to conceive of their Abilities,
 “ most of them believing, they have
 “ brought it to the highest Pitch, in
 “ their respective Countries ; And
 “ however froward they be in enter-
 “ taining any thing new, though
 “ never so Advantageous, besides
 “ what they have received from their
 “ Ancestors ;—Yet, I may be bold
 “ to Advertise them, that, were they
 “ really so knowing, as they pretend ;
 “ or, would they but admit of such
 “ Notice, as might be communicated,
 “ and put them in Practice, we should
 “ have no such Complaints of *uncer-*
 “ *tain Crops, Smuts, Mildews, Lodg-*
 “ *ing*

“ *ing of Corn, its being eaten up by*
 “ *Birds*, and the Loss of whole Crops,
 “ as now we frequently meet with.

“ But so *unskilful*, indeed, is the
 “ Husbandman, generally, in his own
 “ Affairs; so *ignorant*, in appropriat-
 “ ing the Grain to the Soil, to *prevent*
 “ these Inconveniencies, that he knows
 “ not so much as the *Grains* them-
 “ selves, *fit* for these Purposes, though
 “ near Neighbours to him : It having
 “ been, sometimes, found, that the
 “ very Grain, sown in one Part of the
 “ same County, has not been so much
 “ as heard of, in another, tho’ pre-
 “ ferable to all others of its Kind be-
 “ yond Exception.—Witness a sort of
 “ *Wheat*, sown plentifully in the *Vale*;
 “ between *Thame*, and *Watlington*, in
 “ the County of *Oxford*, and called
 “ *mix’d Lammas* ; It being a white-
 “ ear’d, red *Wheat*, which, though
 “ bringing a more certain Crop, and
 “ yield-

“ yielding considerably better, than
 “ most other Wheats, yet not long
 “ ago, was altogether unknown about
 “ *Banbury*, and *Burford*, and, perhaps,
 “ remains so to this Day.

“ Much less are the Grains of *one*
 “ County known in *another* : Witness
 “ the sort of Wheat, called *red-stalk'd*
 “ Wheat, sown plentifully about *Ox-*
 “ *ford*, which, though endued with
 “ the excellent Quality of seldom or
 “ never *Smutting* ; a conveniency, that
 “ best pleases the Chapman, of any,
 “ yet, either has not been heard of,
 “ or is wholly neglected, in most
 “ other Counties. Nor less ignorant
 “ is the Husbandman of *Long-Cone*
 “ Wheat, notwithstanding its not be-
 “ ing subject to Lodging, or being
 “ eaten by Birds, and its constant
 “ Freedom from that Epidemical Dis-
 “ ease of Corn, commonly called the
 “ *Mildew* ; Three Inconveniencies,
 “ some-

“ sometimes so fatal to him, that, by
 “ one, two, or all of them, he loses his
 “ Crop ; Whereas, had he known
 “ these Grains, and would have taken
 “ the Pains to procure, and have used
 “ them, how free might he have been
 “ from all those Inconveniencies,
 “ where-ever his Grounds had been
 “ liable to them.

“ And, as it is in Wheat, so it is,
 “ likewise, in Barley ; for I cannot
 “ hear, that *Patney*, or *Ratheripe* Bar-
 “ ley, is sown any where, but, in *Wilt-*
 “ *shire*, *Berkshire*, *Oxfordshire*, and the
 “ most *western* Parts of *Cornwall* ; not-
 “ withstanding the Advantage of its
 “ being early Ripe ; It having, many
 “ times, been sown, and returned to
 “ the Barn again, in two Months time ;
 “ always, in nine, or ten Weeks, at
 “ farthest, which is very considerable ;
 “ as well in wet, and backward Springs,
 “ and moist Autumns, as in great
 D “ Drought,

“ Drought, when other Counties, that
 “ sow Barley, lose their Seasons, and
 “ Crops, as they did, this very Year :
 “ For, not being able to sow their
 “ Barley, by reason of the great
 “ Drought, till after *Midsummer*, it
 “ was green, at *Michaelmas*, as I saw
 “ in *Kent*, and some other Counties ;
 “ and, as I have Reason to believe,
 “ never came to be ripe at all ; where-
 “ as, had they but known, and used
 “ the *Patney* Barley, tho’ they sow-
 “ ed it not till *July*, they might
 “ have had it in their Sacks again be-
 “ fore *Michaelmas* ; it always coming
 “ to be ripe, in the worst of Sum-
 “ mers.

“ Whence it plainly appears, that,
 “ could you make yourself the happy
 “ Instrument of communicating such
 “ Notices, as these, to all the Parishes
 “ in *England*, and so effectually, as to
 “ get them put in Practice ; for that
 “ is

“ is the greatest Work, though one
 “ would think, indeed, Men should
 “ make but weak opposition against
 “ their own Emoluments, you would,
 “ for ought I know, deserve as much
 “ from the *Publick*, as the Founder of
 “ *Christ's-Hospital*, and all its Benefac-
 “ tors; and receive the Acclamations,
 “ and Applauses, of all good Men,
 “ as the just Reward of so great an
 “ Atchievement, which is all, at pre-
 “ sent, but that,” &c. *R. Plott, p. 31,*
 32, 33, 34, 35, *Vol. Ist.*

And now comes a worthy Knight,
 to join our Country *Chorus*, SIR JO-
 NAS MOOR, who, in a little Book,
 entitled, *England's Interest*, &c. bids
 fair for proving, that an Acre of Land,
 in a few Years time, may be advanc'd
 to the yearly Worth of one hundred
 and forty Pounds—His Words are
 these—

“ To deny, that Land is capable
 “ of Improvement, is to contradict
 “ the Experience of the present, and
 “ former Ages ; and to deny a Truth,
 “ as obvious, as the Meridian Sun :
 “ For how many Acres of Land, in
 “ the Fen Countries, formerly no bet-
 “ ter than the *Irish Bogs*, are, now
 “ by *draining*, and other Improve-
 “ ments, made as good Land, as any
 “ in *England*? And the same Improve-
 “ ment, that is made in the Fen
 “ Countries in one Respect may, in
 “ other Respects, be made in any other
 “ Country.—And, therefore, that
 “ Land may be improved, is what, I
 “ presume, none will deny ; and, that
 “ it may be done to a far greater Ad-
 “ vantage, than what has been hither-
 “ to practis’d, is what I am now to
 “ demonstrate.

P. 1 and 2.

We have a remarkable Improve-
 ment related in Dr. *Boat’s* Natural
 History

History of *Ireland*, in the following
Words, Page 97.

“ How incredibly the Land was en-
 “ rich’d, by this kind of Manuring,
 “ may be gathered by the ensuing
 “ Particular. The whole Lordship of
 “ *Montrath* was thirty Years ago, lett
 “ (by one Mr. *Downings*, who own’d
 “ it, and sold it afterwards to Sir
 “ *Charles Coot*) for fifty Pounds ster-
 “ ling, a Year ; and nevertheless, af-
 “ ter a while, the Farmers surrender-
 “ ed it to him, complaining, that they
 “ could not live upon it, and that it
 “ had quite impoverished them.—
 “ Some time after, it was farm’d by
 “ People, who were newly come out
 “ of *England*, at a hundred and fifty-
 “ Pounds a Year.—This Family, not-
 “ withstanding the tripled Rent, did
 “ not only live very handsomely upon
 “ it, but grew Rich, and Wealthy ;
 “ and did so far improve the Land,

“ that when the last *Irish* Rebellion
 “ broke out, *That same Lordship* might
 “ have been let, for five hundred
 “ Pound sterling a Year, as I have
 “ been assured by several, who had
 “ themselves been Farmers of that
 “ very Land.

Hence it was, says Mr. *Nurse*, in a
Discourse on the Benefits, and Improve-
ments of Husbandry, “ That the bravest
 “ Men, in the first Ages of the World,
 “ betook themselves generally to Hus-
 “ bandry ; which, however simple,
 “ and rude, it appear’d, was found
 “ very Advantageous, and Delightful ;
 “ insomuch, that the Poets of antient,
 “ and modern Times, when they would
 “ describe the true Felicity of Man,
 “ and give their Fancies the largest
 “ Flights of Freedom, and Gaiety,
 “ borrow all their Descriptions from
 “ the Pastoral Life :—And even they,
 “ who give us Characters of great Ge-
 “ nerals,

“ nerals, and Princes, in Heroic
 “ Strains, still represent them by Me-
 “ taphors of this Nature. *P. 5th.*

“ As to the Profits, arising from a
 “ Country Life, it is superfluous to
 “ enlarge upon that, which is so ob-
 “ vious to all the World : And, first,
 “ in Respect of the *general*, or *Com-*
 “ *mon-wealth* : This is the great Vein,
 “ by which the Blood is distributed
 “ through all, and every Part of the
 “ Body, or ’tis rather the very Blood
 “ itself, since it is diffused over the
 “ whole, nor can any Part, or Mem-
 “ ber subsist without it.—It is the
 “ Foundation of Traffick, and Com-
 “ merce ; for as much as all the Ma-
 “ nufactures, and Commodities, which
 “ we export, or receive from foreign
 “ Parts, are but the Productions of
 “ the Earth, either at the first Hand,
 “ or the second.—*Corn, Wine, Oyl,*
 “ *Fruits, Cloth, Linnen, or Woollen,*
 D 4 “ *Silk,*

“ *Silk*, all are the Offspring of the
 “ Earth, cultivated by Art, and In-
 “ genuity.

“ And, as the Husbandman is most
 “ necessary, in time of Peace, so is
 “ He, also, in the Days of War ;
 “ since all the *Stores*, and *Magazines*,
 “ the *Arms*, the *Cloathing*, and the
 “ *Provisions* of the Field, are almost
 “ solely derived from his Care, and
 “ Providence. If we regard the par-
 “ ticular Interest of private Persons,
 “ it is no less obvious, that nothing
 “ more Advances it, than Husbandry :
 “ The many great Estates, and For-
 “ tunes, Men arrive at, this way, are
 “ a certain Proof of this Truth : And
 “ if some miscarry, 'tis no Wonder,
 “ whether it be by their own ill Course
 “ of Life, Ignorance, or Negligence ;
 “ or, perhaps, from some sinister Ac-
 “ cidents, from which no State, no
 “ Condition can be exempted ; But,
 “ in

“ in the general, ’tis certain, that,
 “ considering the vast numbers of
 “ Husbandmen, none make so sure a
 “ Fortune, as They do; and there
 “ are ten Bankrupt Tradesmen, or
 “ Merchants, for one Husbandman,
 “ throughout the Kingdom. *Page* 11,
 “ 12, 13.

“ ’Tis much to be wished, that the
 “ State would afford some Encourage-
 “ ment to Husbandry, by exempting
 “ it; at least, by easing it, as to the
 “ publick Burthens; especially, for
 “ some Years, upon any new Under-
 “ taking, which shall be judged of a
 “ general Advantage: By this means,
 “ Men would venture upon *Projection*.
 “ —’Tis very well observed by a most
 “ ingenious, and learned Gentleman,
 “ in his Remarks upon one of the
 “ greatest, most antient, and most po-
 “ lished Governments upon Earth;
 “ when he tells us, That *Agriculture*

“ is encouraged by so many special
 “ Privileges from the Crown, and the
 “ Common Laws, and Customs of
 “ the Country, that, whatever Wars
 “ happen, the Tillers of the Ground
 “ are untouched, as if they were sa-
 “ cred, like the Priests in other Places ;
 “ so that no Country in the World
 “ was ever known to be so well Cul-
 “ tivated, as the whole Kingdom of
 “ *Cbina*.—Whereas, with us, and
 “ other neighbouring Countries, ’tis
 “ the poor Husbandman, who must
 “ support, in a manner, the whole
 “ Expence of a War, &c. In fine,
 “ what I have written on this Sub-
 “ ject is not grounded on the Reports,
 “ and Methods of other Authors, but
 “ upon my own Observations, in a
 “ long, and happy Country Life.

Page 24.

Hear,

Hear, next, Mr. ATWELL, in his *faithful Surveyor*.

“ This I have seen in a dry Year,
 “ in a Meadow, near *Hartford*.—
 “ A Man, who had a Piece of Ground
 “ within the Command of Water,
 “ flowed it, and, by that means, made
 “ five Pound an Acre of his first Crop;
 “ when his Neighbours in better
 “ Ground, could scarce make twenty
 “ Shillings. *Faithful Surveyor*, p. 87.

“ I have, in a wet Year, sown *Pi-*
 “ *geons Dung* by Hand, upon my fan-
 “ dy Grounds, when my Crop has
 “ been sold for more than the whole
 “ Worth, or Fee-simple of the Land,
 “ it grew upon.

“ It is almost incredible, the
 “ odds of an Acre of Barley, in
 “ *Hitching Parish*, fifty Years ago,
 “ and twenty Years ago; and all, by
 “ the use of *Raggs*, and *Horn-Shavings*.
 “ —They have so mended their Soil

“ by it, that, whereas, about fifty
 “ Years ago, an Acre of their Barley
 “ was not above three Pound ten, or
 “ four Pound the Best.—Now, about
 “ twenty Years ago, I was requested
 “ to measure two Acres of Barley, in
 “ a Field, called *Kings Field*, in *Hitch-*
 “ *ing Parish*, the Crop of which was
 “ fold for nine Pound an Acre, by the
 “ Statute Pole.” *Faithful Surveyor*,
 p. 106, 107.

MARKHAM comes next, and in-
 forms us, who a Professor of this Art
 is,—“ A *Husbandman* is one, who,
 “ with Order, and with Judgment,
 “ tills the Ground in proper Seasons;
 “ forcing it to produce whatever is
 “ necessary for the Sustenance of Man.
 “ —This is He, to whom God, in the
 “ Scriptures, gives so many Blessings :
 “ This is He, whose Labours are, of
 “ all others, the most excellent ; and,
 “ therefore, to be a Husbandman, is
 “ to

“ to be a good Man.—A Husband-
 “ man, may, of all Mankind, be most
 “ properly called *Lord* of the Earth,
 “ for he commands and governs it,
 “ in the most absolute manner,—He
 “ says to Barrenness, *be* thou fruitful,
 “ and encrease; and Barrenness obeys,
 “ and brings forth Plenty.—It is to
 “ him we owe the Bread, we live upon:
 “ All Ranks, all Callings, are depen-
 “ dant on him, and upon his good, or
 “ ill Success, hangs the Fortune of
 “ their Labours.—The *Necessity* of this
 “ noble Art may be inferr’d from its
 “ *Profit*: For, since Profit is not only
 “ most universally aim’d at, but uni-
 “ versally requisite, This, of all Arts,
 “ is certainly most necessary, because
 “ its Profit does so very far exceed all
 “ other.—But I wou’d have Men
 “ know, that the Name of *Husband-*
 “ *man* is no way due to the *Clown*, the
 “ *Peasant*, or the *Plowman*;—No—
 “ He

" He is a Creature of another Mould :
 " No Son of *Adam*, from the *Cottage*,
 " to the *Crown*, how excellent soever,
 " if he is excellent indeed, can pos-
 " sibly assume a *richer, better, or a*
 " *greater Title*, than that of *Husband-*
 " *man.*" *Eng. Husb. P. 3, 4, 5.*

AUSTIN, of *Planting*, observes,—
 " There are many good Wits exercised
 " about Toys, and Trifles, and who
 " bestow excessive Time, Cost, and
 " Labour about meer Shadows; How
 " much might These advantage them-
 " selves, and others, in searching out
 " a thousand hidden Secrets of Na-
 " ture, by the Study, and Practice of
 " *Agriculture.* Not He, *says an antient*
 " *Author*, who knows *many Things*,
 " but He, who knows *profitable Things*,
 " is wise.

" This Art is a mighty *Storehouse* of
 " Meat, Drink, and Money; 'Tis a
 " a rich *Mine*, out of which we may
 " dig

“ dig Profit, and Pleasure, without
 “ fear of ever coming to the Bottom :
 “ Nay, if you will, 'tis the *Philoso-*
 “ *pher's Stone*, which turns Trees,
 “ Fruits, Earth, Iron, and Water, into
 “ Gold, without the smallest Hazard :
 “ The Excellence of this Employment,
 “ both in the Practice, and the The-
 “ ory, extends itself to every Place,
 “ and Person, in the World ; from the
 “ Cradle to the Grave, and from the
 “ Beginning of the World to the very
 “ End thereof.—Nothing can be so
 “ universally good, as This.

“ It is much easier to prevail with
 “ People by *Examples*, than by *Pre-*
 “ *cepts*, or *Rules* ; and, if Examples
 “ of Great Men, even in wicked
 “ Things, are so powerful with most
 “ People, how much more prevalent
 “ shou'd they be in the honest, and
 “ the virtuous ? We have a twofold
 “ Argument, concurring to excite the
 “ Practice

“ Practice of Agriculture: *Precedents*,
 “ and those of the highest, even *Kings*,
 “ *Emperors*, and *Philosophers*; And
 “ *Virtue*, the highest, which any se-
 “ cular Profession is capable of con-
 “ taining.

“ If, *says a Writer*, the Dignity of
 “ Husbandry may be drawn from the
 “ worth of such as have been Hus-
 “ bandmen, then it is a Kingly Art,
 “ and chiefest of all others.—*Kings*,
 “ *Princes*, *Roman Emperors*, and the
 “ highest Powers on Earth, have not
 “ disdain’d to perform this Work with
 “ their own Hands, and taken great
 “ Delight therein.” P. 20.

“ This is an Age,” *says another Au-*
thor, WORLIDGE, in *Laudem Agricul-*
turæ, “ wherein to commend, or ex-
 “ tol an ingenious Art, or Science,
 “ might be esteem’d a needless Labour,
 “ but that we find the more noble and
 “ worthy a Profession is, the stronger
 “ Ar-

“ Arguments are fram’d against it;
 “ and more particularly against this
 “ rustic Art, and its infinite Prehemi-
 “ nencies to any other, by the Vainer;
 “ and Pedantic sort of People, who
 “ despise the Value of every Thing,
 “ they are ignorant of; and judge it
 “ below their Reputation, to take No-
 “ tice of so mean a Profession.—This
 “ makes me tread in the Steps of more
 “ worthy Authors, not to court the
 “ Credit of the *Obstinate*, but to con-
 “ firm the *Doubtful*, of the Excellence,
 “ and inestimable Value of this Art;
 “ not only for the Health of our Bo-
 “ dies, but the Encrease of our For-
 “ tunes, and our universal Use, Plea-
 “ sure, and Advantage. Those, who
 “ are conversant with the Works of
 “ ancient Writers, need not be in-
 “ form’d how many wise and mighty
 “ Men, were Tillers of the Earth.—
 “ The Study of *Agriculture* was of
 “ such

“ such high Esteem, that *Monarchs*
 “ themselves have not only labour’d *in*
 “ *it*, but acquir’d a lasting, and im-
 “ mortal Name, by their Writings of
 “ *it*.—*Xenophon*, in his Tract of *Oeco-*
 “ *nomics*, tells us, nothing can be of
 “ a more regal Estimation, and Splen-
 “ dor, than judicious Agriculture.—
 “ *Pliny* writes, that the *Romans* had
 “ so high an Esteem for Agriculture,
 “ that they extended their Laws to
 “ their Reformation of its Abuses.

“ ’Tis evident, that this Art requires
 “ far less Charge, and Expence, than
 “ Labour, and Industry; And, to pos-
 “ sess Men with this, and encourage
 “ them to it, is the Scope of all its
 “ Writers, both antient, and modern.
 “ —How much more Praise-worthy
 “ is the Practice of this, than to spend
 “ our Time in trifling and insignifi-
 “ cant Studies. It cannot be thought,
 “ that such wise, and learned Men,
 “ wou’d

“ wou’d so profusely scatter Praises,
 “ for which they had not great, and
 “ solid Reasons : Not to speak of the
 “ delightful Entertainments, which a
 “ Country Life abounds with, what
 “ Art cou’d possibly subsist without it?
 “ This is the indulgent Mother, by
 “ whose Milk the World is nourish’d :
 “ Our Labour, and our Charges, here,
 “ return upon us with a manifold En-
 “ crease of Advantage.—The Ro-
 “ mans, when they gave Names to
 “ their Tribes, distinguish’d the chief,
 “ among them, by the Name of *Rustic*,
 “ and the meaner, in Degree, were
 “ call’d the *Urbane*.

“ *Numa Pompilius*, to encourage
 “ Agriculture, commanded the Fields
 “ to be divided into a certain number
 “ of Villages, over each of which he
 “ constituted a Supervisor ; whose
 “ Office it was to observe, who till’d
 “ his Land industriously, and who
 “ ne-

“ neglected it. He often sent for the
 “ diligent Husbandman, and, having
 “ courteously receiv’d him, wou’d dis-
 “ miss him with Rewards.—As,
 “ on the contrary he wou’d rebuke
 “ the Ignorant and Slothful. Thus
 “ some, for fear of Disgrace, and
 “ and others, in Hopes of Reward,
 “ were continually intent on their Af-
 “ fairs: The like Examples we find
 “ in several Countries, *Spain, Holland,*
 “ *Germany, Venice.*—In *Burgundy*, they
 “ must not fell a Tree, till they have
 “ planted another near it.—And, in
 “ several Places of *Germany*, about
 “ *Hainault*, and *Franckfort*, no young
 “ Farmer is permitted to Marry, till
 “ he has planted such a stated Num-
 “ ber of Walnut Trees.—We have,
 “ in *England*, many good Laws to
 “ this Purpose, but none so slighted,
 “ and neglected, as *they*. But our
 “ Hopes, and Expectations are now
 “ great,

“ great, that something will be done
 “ herein ; seeing That *Royal*, and most
 “ excellent *Society*, at *Gresham College*,
 “ make it the principal Object of their
 “ Studies, and Care.

“ *Maximus Tyrius*, a most grave
 “ Philosopher, compos’d a Dialogue,
 “ wherein, by many, and convincing
 “ Reasons, he demonstrates, that the
 “ Art of *Agriculture* is even more ne-
 “ cessary, than the *Military*.—As to
 “ the State, Qualification, and Con-
 “ dition of a Country Life, we may
 “ confidently affirm, that it far excels
 “ the City Life, and is infinitely to
 “ be preferr’d before it.—*Plato* avows
 “ a Country Life to be the Pattern of
 “ Diligence, Justice, and Frugality,”
 &c. *System. Agric. Pref.*

Page 26, *Speaking of Clover*, he says,
 “ In *Brabant*, they talk of keeping
 “ four Cows, Winter and Summer,
 “ upon one Acre of this Grass.—
 “ Here,

“ Here, in *England*, an Acre has kept
 “ four Coach-Horses, and more, all
 “ Summer long.

“ In *Wiltshire*, there are several
 “ Precedents of *St. Foyn*, that has been
 “ growing, these twenty Years, on
 “ poor Land, and has so far improv’d
 “ it, that, from a *Noble* an Acre,
 “ twenty Acres together have been
 “ constantly let for thirty Shillings an
 “ Acre, and yet continues in good
 “ Proof. *Page 29.*

“ In every Part of *England*, there
 “ is much waste Land, and other old
 “ Pasture, that bears the Name of
 “ barren Land, which, by good Hus-
 “ bandry, may be made very fruitful,
 “ and profitable, to the Owner, in par-
 “ ticular, and the Common-wealth, in
 “ general; as is evident, in many Par-
 “ cels, lately so improv’d.”-- *Page 37.*

“ This way of *burning* is us’d on
 “ the poorest and barrenest Land, in
 “ *England*,

“ *England*, or *Wales*, where, before,
 “ hardly any Thing wou’d grow ; and
 “ *now*, there grows as good Wheat,
 “ and other Grain, as on the finest
 “ Land you have. There are many
 “ Precedents hereof, in several Parts
 “ of *England*, where, by this means
 “ only, as much is gotten, over and
 “ above áll Expences, as the Pur-
 “ chase of the Land was worth be-
 “ fore.”

Page 37.

“ The Advantages of a *Cherry Or-*
 “ *chard* are very great ; Mr. *Hartlibb*
 “ gives the Relation of a Cherry Gar-
 “ den, about *Sittingburn* in *Kent*, of
 “ thirty Acres, that produc’d in one
 “ Year, above a thousand Pound Pro-
 “ fit.

System. Agric. P. 114.

“ But think it not strange, that
 “ common and well known Plants
 “ shou’d prove so beneficial ; It is for
 “ no other Cause, but that some Men
 “ are more industrious, and ingenious
 “ than

“ than others: It is hard to find any
 “ Occupation, Trade, or Employment,
 “ by which a Man may presume on so
 “ noble, and large a Requitall, of his
 “ Time, Cost, and Industry. But ig-
 “ norant, and self-will’d Men are,
 “ naturally, prone to raise Objections;
 “ and thereby deter themselves, and
 “ others, from any thing whatsoever,
 “ which is either Pleasant or Profit-
 “ able.—However, we hope better
 “ of the ingenious, who, by becom-
 “ ing Precedents to their Neighbours,
 “ may make our Land a Land of
 “ Plenty.” P. 144.

“ P. 145.—I mention *Hops*, in the
 “ first Place, not for its Worth, or
 “ Dignity above the rest, but because
 “ of all other Plants, it advances Land
 “ to the highest Improvement; often,
 “ to forty or fifty, and sometimes, to
 “ a hundred Pound an Acre.

“ Some, who have rais’d good *Li-*
 “ *quorice*, have gain’d well by it; the
 “ better the Land is, the more is
 “ the Advantage.—It has clear’d,
 “ from fifty, to a hundred Pound an
 “ Acre.” *Page 157.*

I have one great Author more to quote, and *That* is a *King*, and a King of our own Nation, King *James* the first, who was so far from thinking a Regard for this Art below the Majesty of a Prince, that he has left behind him a very uncommon, and remarkable Proof, how earnestly he Labour’d to encourage it, and how Zealously he recommended it to his People.—What follows is the Copy of a Letter, which he sent to the *Lords Lieutenants* of the several Counties, in *England*, for the Propagation of Mulberry Trees throughout the Kingdom.

E

JAMES

JAMES REX,

“ Right Trusty, and Well-Belov’d,
 “ we greet you well.—It is a principal
 “ Part of that Christian Care, which
 “ appertains to Sovereignty, to en-
 “ deavour, by all means possible, as
 “ well to beget, as to encrease, among
 “ their People, the Knowledge, and
 “ Practice of all Arts, and Trades,
 “ whereby they may be both wean’d
 “ from Idleness, and the Enormities
 “ thereof, which are infinite; and ex-
 “ ercis’d in such Industries, and La-
 “ bours, as are accompanied with evi-
 “ dent Hopes, not only of preserving
 “ People from the Shame, and Grief
 “ of Penury, but also raising, and en-
 “ creasing them in Wealth, and Abun-
 “ dance; the Scope, which every free-
 “ born Spirit aims at, not in regard
 “ of Himself alone, and the Ease,
 “ which a plentiful Estate brings
 “ to

“ to every one in his Particular, but
 “ also in regard to the Honour of his
 “ native Country, whose Commenda-
 “ tions are no way more set forth,
 “ than in the People’s Activeness, and
 “ Industry. — The Considerations
 “ whereof having of late occupied our
 “ Mind, who always esteem our Peo-
 “ ple’s Good our necessary Contem-
 “ plation; we have conceiv’d, as well
 “ by the Discourse of our own Reason,
 “ as by Information gathered from
 “ others, that making of *Silk* might
 “ as well be effected *here*, as it is in
 “ the Kingdom of *France*, where the
 “ same has, of late Years, been put
 “ in Practice; For neither is the Cli-
 “ mate of this Isle so far distinct, or
 “ different in Condition from that
 “ Country, especially from the hither
 “ Parts thereof, but that those Things,
 “ which by Industry prosper *there*,
 “ may, by a like Industry us’d *here*,
 E 2 “ have

“ have the same Success. Many pri-
 “ vate Persons, who, for their Plea-
 “ sure, have bred these *Worms*, have
 “ found, that they may be nourish’d,
 “ and maintain’d here, if Provision
 “ were made for planting of *Mulberry*
 “ *Trees*, whose *Leaves* are the Food of
 “ the *Worms*. Therefore, we have
 “ thought good hereby to let you un-
 “ derstand, that although in suffering
 “ this Invention to take Place, we
 “ shew ourselves an Adversary to our
 “ Profit, by our *Customs* upon Silk
 “ brought from beyond Sea, which
 “ will receive Diminution; Never-
 “ less, when there is so great, and
 “ publick Utility to come to our
 “ Kingdom, and Subjects in general,
 “ and whereby such Multitudes of
 “ People of both Sexes, and all Ages,
 “ such as, in regard of Impotency,
 “ are unfit for other Labour, may be
 “ set to Work, comforted, and relieved;
 “ we

“ we are content, that our *private* Be-
 “ nefit shou’d give way to the *Pub-*
 “ *lick*.—And therefore, being per-
 “ suaded, that no well-affected Subject
 “ will refuse to put his helping Hand
 “ to such a Work, as *can* have no
 “ other private End in *us*, but a De-
 “ fire of the Welfare of our People,
 “ we have thought good, in this
 “ Form only, to require you (as a
 “ Person of greatest Authority, in
 “ that County, and from whom the
 “ Generality may receive notice of our
 “ Pleasure, with more Conveniency
 “ than otherwise) to take occasion, ei-
 “ ther at the Quarter Sessions, or some
 “ other publick Place of Meeting, to
 “ persuade, and require such, as are of
 “ *Ability* (without descending to trou-
 “ ble the *Poor*, for whom we seek to
 “ provide) to buy, and distribute in
 “ that County, the number of ten
 “ Thousand *Mulberry Plants*, which
 E 3 shall

“ shall be deliver’d to them at our Ci-
 “ ty of——at the Rate of three Far-
 “ things the Plant; or at six Shillings
 “ the Hundred, containing five Score
 “ Plants. And because the buying of
 “ the said Plants, at this Rate, may,
 “ at the first, seem chargeable to our
 “ Subjects, whom we wou’d be loth
 “ to Burthen, we have taken order,
 “ that, in *March* or *April* next, there
 “ shall be delivered, at the same Place,
 “ a good Quantity of *Mulberry Seeds*,
 “ there to be Sold to such, as will
 “ Buy them: By means whereof the
 “ said Plants will be delivered, at a
 “ smaller Rate, than they can be af-
 “ forded, being carried from hence:
 “ Having resolv’d also, that there
 “ shall be publish’d, in Print, a plain
 “ Instruction, and Direction both for
 “ encreasing the *Mulberry Trees*,
 “ breeding the *Silk Worms*, and every
 “ other Thing needful to be under-
 “ stood,

“ stood, for the perfecting a Work,
 “ which is every way so Commendable,
 “ and Profitable, as well to the *Plant-*
 “ *er*, as to the *Manufacturer*.—Having
 “ now made known unto you the
 “ Motives, wherein every Man is
 “ interested; because we know how
 “ much the Example of our own
 “ *Lieutenants*, and *Justices*, will fur-
 “ ther this Cause; if you, and other
 “ your Neighbours, will be content
 “ to take some good Quantities hereof,
 “ to distribute upon your own Lands,
 “ we are ready to acknowledge thus
 “ much more, that all Things of this
 “ Nature, tending to Plantation,
 “ Encrease of Science, and Works
 “ of Industry, are Things so natu-
 “ rally pleasing to our Disposition,
 “ that we shall take it for an Argu-
 “ ment of extraordinary Affection
 “ towards our Person.—Besides the
 “ Judgment, we shall make of the
 E 4 “ good

“ good Dispositions of all those, who
 “ shall express their Readiness to fur-
 “ ther the same, as if they sought
 “ thereby to further our Honour and
 “ Contentment. We have seen, in
 “ few Years past, that our Brother
 “ the *French King*, has, since his
 “ coming to the Crown, both be-
 “ gun, and brought to Perfection,
 “ the making of *Silks*, in his Coun-
 “ try, whereby He has won, to
 “ Himself *Honour*, and to his Sub-
 “ jects, a marvellous Encrease of
 “ *Riches*.—We shou’d account it no
 “ little Happiness to Us, if the same
 “ Work, which we begin, among
 “ our People, with no less Zeal to
 “ *their* Good, than any Prince can
 “ have for the Good of *His*, might,
 “ in our Time, produce the Fruits,
 “ which, *there*, it has done; whereof
 “ we nothing doubt, if *ours* shall be
 “ found as tractable, and apt, to fur-
 “ ther their own Good, now the way
 “ is

“ is shew’d them by their Sovereign,
 “ as the Subjects of *France* have been,
 “ to conform themselves to the Direc-
 “ tion of their King. Given under
 “ our Signet, at our Palace at *West-*
 “ *minster*, the sixteenth Day of *No-*
 “ *vember*, in the sixth Year of *En-*
 “ *gland, France, and Ireland*; and of
 “ *Scotland*, the two and fortieth.”

And now, I think, I have sur-
 rounded my Cause, by such an *Army*
 of Champions, that she need not fear
 the Onsets of the Envious, or the Ig-
 norant.—With how much Ease cou’d
 I have brought a thousand Testimo-
 nies more! But the *wise* will own De-
 monstration, at her first Appearance,
 and, to *Fools*, or *Madmen*, who ad-
 dresses his Endeavours?

The Use, I wou’d propose from all
 these Proofs, is, that the *Owners* of
 our Lands being thus convinc’d of the
Dignity, and *Profit*, of an Art they
 have so long neglected, or been igno-

rant & wou'd, for the future, apply their Judgment *most* to the Improvement of those Estates, which most deserve their Application, and will best reward it.—Such a noble Industry wou'd set them, soon, above a thousand daily Mortifications, of their present Condition, and be the only means to recover that Respect, which was antiently paid to the *Landed Interest* of this Kingdom.

But, it remains that, having said so much of the *Design*, I shou'd be a little particular, as to the manner of Executing it. I shall Write something on this Head, as briefly, as I can; there being more already Written, upon that Subject, than is generally known.—I have myself collected near a hundred Volumes, some of which are excellent, in their several Kinds, and may almost merit the Title of compleat *Systems*. The Study itself,

as 'tis far from difficult, will also prove the most delightful, you can possibly engage in; and there only want *Beginners*; for, when the Ice is broke, the Waters will be found so very sweet, and tempting, that few wise Men will draw, for constant Use, from any other Fountain.

To instruct the *Willing* what Books they may enquire for, I will name the Authors, from whom you are to expect most Information in the Art, and all its Branches.

There are many Pieces extant, under the Title of *Transactions of the Royal Society*, which are interlac'd abundantly, with excellent Instructions, and Experiments, in Husbandry.— Many of the famous Mr. *Boyle's* Works are enrich'd with curious Observations of this Nature.—

Lord Verulam's Natural History.

Systema Agriculturæ—By Mr *Wor-*
lidge.

The whole Art of Husbandry. By
J. Mortimer, Esq;

Part the 2d of the same—By the
same Author.

Sylva, or a Discourse of Forest Trees.
By *J. Evelyn, Esq;*

Dr. *Beal*, of Herefordshire Orchards.
Markham's Enrichment of the Weald
of Kent.

English Husbandman. By *G. Mark-*
ham.

Farewell to Husbandry. By the
same Author.

A Discourse of the Flanders Hus-
bandry. By Sir *R. Weston.*

Hartlib's Legacy of Husbandry.

Annotations upon the Legacy. *E-*
dit. 3d.

Jewel House of Nature, and Art.
By Sir *Hugh Platt.*

Adam's

Adam's Art reviv'd. By the *same*
Author.

Of the Improvement of barren
Land. By T. G.

Dictionarium Rusticum, &c.

Googe of Husbandry.

Blith's English Improver.

Improver improv'd. By the *same*
Author.

Houghton's Letters of Husbandry
and Trade.

A Discovery of Hidden Treasure.
By G. Platt.

These, or such of them, as you can
most readily procure, (for some of
these are very scarce) will give the ut-
most Knowledge requisite, for as large
Improvement, as in any of the fore-
going Precedents.

But I hasten to my own particular
Task, and will undertake to prove,
that every private Gentleman in *En-*
gland, may, by taking his Lands into
his

his own Management, advance his Estate, immediately, to a *double* Value, and *That*, without the Trouble of seeking much Knowledge or making new Improvements;—even, by the downright *common* Road of Husbandry, as it is now practis'd.

And here it will be no Objection to tell me, *Gentlemen* are wholly ignorant in these Affairs, and that we see, by general Experience, that Men, who do take Lands into their own Hands, are always Losers by the Bargain.—I deny the Observation; or, if 'twere true, it makes nothing against my Argument: For they, who, having Farms thrown up by their Tenants, leave the Cultivation of them to their *Stewards*, taking such Accounts, as *They* think fit to give them, may well be Losers by the Bargain; and yet This is what we call keeping Land in our own Hands.

But,

But, previous to my Argument, I observe, that, though 'tis not necessary for a Man, who wou'd double his Rents, to be much skill'd in Husbandry, we must, at least, suppose him a Person of good Understanding, in common Matters, and of an industrious Disposition; one, who will allow, that so considerable an Augmentation of his Estate, deserves six Months continuance in the Country.

Suppose we then a Gentleman, so qualified, and so dispos'd, has a Farm thrown into his Hands, at *Lady Day*, which contains, of Arable Land, a hundred Acres:—He is, just about this Time, come down to pass the Summer, at his Country House; and, when his Steward tells him, that, no new Tenant offering to take his Farm, it will be best to sow it on his own Account, how easy wou'd it be to send for others of his Tenants, and,
in

in order to determine which way to proceed, ask these kind of Questions.

I have an Inclination to *till* the Farm, which is newly quitted ;—*Is it in a good Condition ?*

They will tell him—*No*—That it has been Plow'd so long, till the Heart of the Ground is worn away ; and that it will require new *making*, as they call it, that is *Manuring*, before it can be fit to bear any kind of Grain to Advantage.

What is the fittest Manure for the nature of the Ground ?

The Answer will be, *good Dung*.

How much on an Acre ?

About twenty Load.

What will it cost a Load ?

About twelve Pence.

What Grain will it bear after this Charge ?

Wheat.

Is the Season proper ?

Yes ;

Yes; we sow Wheat in *September*, or *October*, and there is Time enough to prepare the Ground between this, and then.

Pray let me know the whole Charge of an Acre of Wheat.

Why, the Ground, being already in Tillage, will require, besides the Dunging, *two Plowings* only, and each Plowing will be four Shillings an Acre: The *Seed* will be two Bushels to an Acre, which, at five Shillings a Bushel, comes to ten Shillings more: Then there is *Weeding*, and *Reaping*, and *Binding* will be about five Shillings more: Then *Inning* of Harvest, and repairing of Fences, may be five, or six Shillings: And as for *Thrashing*, the Charge of that may be according as the Crop proves.

How so?

Because we pay the Thrashers for Wheat, after the rate of threepence a Bushel.

How

How many Bushels have you commonly on an Acre?

Why, that is just according as it happens, sometime more, and sometimes less : I have known four, or five Quarters upon an Acre ; and, at other Times, I have reaped but two Quarters ; But upon new made Lands, we generally reckon *thirty Bushels* a midling Crop.

But am I to Dung my Ground every Year ?

No—once Dinging will hold out three Crops.

May all these Crops be Wheat ?

No :—That wou'd not be proper ; —The *first* should be Wheat, the *next* may be Barley, and the *third* Pease.

What are the different Values of these Crops ?

Why, we generally reckon a Wheat Crop, as I said, about thirty Bushels ;
and

and truly Pease and Barley, bear as many, or sometimes, a pretty deal more.

Are the Charges of the Barley, and Pease Crops, the same, as the Wheat, only bating the Dung?

No : very different : In the Barley, which is mow'd, instead of reaping, you save, by That, and other Things, about seven Shillings an Acre ; and Pease, being cheaper in the Seed, and requiring to have the Ground but once Plowed, will stand you in less, than the Wheat Crop, by above thirteen Shillings an Acre, besides the Charge of your Dung, sav'd.

It must be allowed me, that all these are Questions which any Gentleman may have Wit enough to ask ; and, if That be granted, I am sure, the Answers, he must receive, will make much better for my Argument, than those I have set down : For, I have,

pur-

purposely, enlarged the Charges, and diminished the Crops, even in the *common* way of reckoning; as any Body may know, who will give himself the Trouble of an Enquiry.

Well then; The Use, which any *thinking* Man would make of these Informations, would be This: He would presently go into his Study, and, writing down the several Particulars, compute the *Expence*, and compare it with the *Income*; which Account would stand thus.

Expence of an Acre for the three Crops.

Twenty Load of Dung,	<i>l.</i>	<i>s.</i>	<i>d.</i>
at 1s. a Load - -	1	00	0
Two Plowings, Each 4s.			
for the Wheat - -	0	08	0
Two Bushels of Seed			
Wheat, at 5s. Each -	0	10	0
Weeding, Reaping, and			
the Binding Wheat -	0	05	0
		Inn-	

Inning the Wheat, re-	<i>l.</i>	<i>s.</i>	<i>d.</i>
pairing Fences, &c. -	0	06	0
Thrashing the Wheat -	0	07	6
The whole Charge of the Barley Crop, being less, than the Wheat, be- sides the Dunging, by seven Shillings - -	1	11	6
The whole Charge of the Pease Crop, being less, than the Wheat, by thirteen Shillings. -	1	05	6
	<hr/>		
Total Expence	5	13	6
	<hr/>		

Income of an Acre, by three Crops.

Thirty Bushels of Wheat,			
at 5s. a Bushel - -	7	10	0
Thirty Bushels of Barley,			
at 2s. 6d. - -	3	15	0
Thirty Bushels of Pease,			
at 3s. 6d. - -	5	05	0
	The		

The Straw of the three	<i>l.</i>	<i>s.</i>	<i>d.</i>
Crops, tho' but to burn,			
will be worth	-	-	- 0 15 0
			<hr/>

Total Income	17	05	0
			<hr/>

By this Computation, he would perceive, that, even according to the Countrymen's own way of reckoning, the Profit would be more than three times the Charge; so that, supposing his former Rent to have been so much as one Third, his present Charge would be but another, and, it therefore, plainly appears, that, in this beaten Road of Husbandry, the Revenue of his Farm will be more than *doubled*.

But I needed not have taken so much Pains to inculcate a Truth, which the Farmers themselves are always ready to confess; allowing it
for

for a general Maxim, that *a good Farm must yearly make three Rents*, the first, for the *Landlord*, the second for *Charges*, and the third, for the *Tenant* and his *Family*. And, indeed, if this were not so, the Renters of Land must starve, or pay nothing.—Let it, therefore only be allowed me, that the same Workmen, at the same Charge, can do That for a *Gentleman*, which they do for a *Clown*, and you prove this Position, for yourselves, to the direct *doubling* the Value of your Estates.

I might also hint the great Advantages, which most Gentlemen have of common Farmers, as to the expensive Part of this Work;—The Dung, the Horses, and the Workmen: And what Gentleman, of any Note in *England*, who has not, or who might not have, all these at Call, without the least additional Charge to his common Household Expences?

If

If any Body will continue to oppose the weak, old Argument against me, of, *Every Man in his own way*, and that there are *certain Secrets in the Practice of this Art, which the Farmers keep among themselves; and which Gentlemen, or Those they employ, must be ignorant of, and, of Consequence, miscarry;* I content myself to Answer, once for all, that this Objection is so far from being just, that it deserves no further Notice.

The foregoing Plan, for three Years Tillage, though exactly suited to the *common* Road, is very far from being recommended, as a Pattern; 'tis the *least* Improvement you can make of Land, and the worst way of making it into the Bargain. It is only introduced to shew how easy it is for any Man to be instructed in the Farmer's whole Treasury of Knowledge: For all, beyond that little Store, is *Terra in-*

incognita to the deepest of their Discoveries.

Some Gentlemen may think it too much Pains, and Trouble, to attend a three Years issue of their Labour, which is, also, *then* to be repeated, if they would keep up their Advantage. I shall not advise such Persons to commit the Management of the Affair to Deputies, tho' never so much esteemed, and faithful.—Indeed, the toilsome Part, and the continual Application requisite, may well admit of an honest Servant's Attendance; but the frequent Inspection, Reproof, and Encouragement, of the Master himself will be absolutely necessary. And 'tis no ill Doctrine, we are taught by a plain Country Proverb, which tells us, that the *best Dung in the World is the Master's Foot*.

But there are many Men, whose Genius cannot hit the Relish of our
 F Country

Country Employments ; These seldom enter *Corn-Fields*, but through the *Hedges* ; nor would know the name of *Stubble* but for the Game *it* shelters : Such, as these, are kept back, by Nature, from an Application to Improvement, and will not consider, that the frequent Intervals of Business, and Pleasure, heighten, and encrease the Satisfaction of each other. There are some again, who, though they could with much Delight, pursue the Practice, are deprived, by other Calls, of Leisure to attend it.

There are many ways, whereby these Gentlemen may, notwithstanding this, improve their Rents, at once indulging both their Inclination and their Profit ; and That not out of the common Road neither.—I could demonstrate This by many Instances, but will confine myself to one Proof only ; supposing that, when Men are
once

once convinced, a Thing is to be done, they will readily bestow a little Thought upon the wisest Method of performing it.

I will put such a Gentleman into the same Condition with the former; He has a Farm of a hundred Acres, thrown into his Hands, at *Lady-Day*: The Heart of the Ground has been plow'd out, by a malicious, or an indigent Tenant: The badness of his Land invites no Bidder, till, perhaps, towards *Michaelmas*, some monied Neighbour, to take Advantage of this Circumstance, bids a Crown an Acre; the Gentleman had let it, before, for ten Shillings, and is, therefore, unwilling to have it go, at a half Rent, but the other will give no more: The Farm, as the Country Phrase runs, is *blown upon*; no Body offers otherwise; The Owner can make nothing of the Land himself, and, after the loss of a

Year's Rent, the Farm is let for five and twenty Pound per annum, which, till then, had always gone, at fifty.

This is the the very Case of many a Gentleman in every Part of this Kingdom. I have known a Plot laid by a dozen rich Farmers in a Neighbourhood, *to pull down a Plume*, as they call it: And, though the Abatement is not always so Monstrous, as we suppose it here, yet by a little *this Year*, and a little *next*, it generally comes to one, and the same Conclusion.

Now had this Gentleman, among all his Amusements, but just found Leisure to inform himself, that ten Shillings worth of Dung upon an Acre, would qualify his Land for *St. Foyn*, or *Clover*; and that the whole Charge of such an Improvement would scarce exceed the Year's old Rent of his Ground, he would certainly sow one
of

of those Grasses, according to the Nature of his Soil; and, if he did, without any further Charge, or Trouble, he would have Offers enough: And the very Man, who, were his Land neglected, would have had it, at five and twenty Pound a Year, will now be glad to come in, upon this Improvement at *Michaelmas Day*, and give him two Hundred.

'Tis true, I have often known *Clover* and *St. Foyn*, make little Improvement: but the Ground has neither been rightly prepared, nor the Seed well chosen, or well sown. 'Tis a standing Custom among Countrymen to sow *Clover* with *Oats*, or some other Grain; And this they do, for the Advantage of a poor Crop the first Summer, before the Grass is come to Perfection: But they are ignorant, that, by this means, the *Clover* can never cover the Face of the Ground, but,

growing thin, and here and there, in Tufts, and Parcels, the natural Children of the Field, Weeds, common Grass, and Trumpery, prevail against it, and, in a Year or two, after the first, it is quite choaked, and comes to nothing.

But I have done with this Particular, and hasten to direct, not a new Husbandry, but a *new Method* of Husbandry.—I speak now to such, as are *willing* to improve their Estates, but ignorant in the *means* of doing it.—I design not to advise the Propagation of *Woad, Madder, Saffron, Liquorice, Hops, Safflower, Rape-seed*, or other Plants of this Nature.—A general Application to Agriculture would suddenly discover, and pursue the vast Advantages, accruing from so desirable an Industry. But, as I have said a Word or two of the *common Paths* in *common Husbandry*, so I will demonstrate

monstrate by what means any Gentleman, who would set about the same Work, in an *uncommon manner*, may proceed to a very great Enlargement of his Fortune, by the Grains, in general use amongst us, such as *Barley, Pease, Wheat, Beans, Rye, Oats*, and such like Things, which have a use in every Part, and find a Vent in every Market.

I will not insist upon a frugal Method, which might very decently, as well as profitably, be introduced, of keeping the same Horses for our *Teams*, which we maintain for our *Coaches*, and the same Servants for our *Labour*, which we make use of for our *Vanity*. I know, the fine unthinking part of Mankind are apt to turn this wise Frugality into Ridicule, and expose it, as an Act of Avarice, or want of Relish in the politer scenes of Life: But, when I address myself to the *pru-*

dent Man, I may venture to tell him, that, in my Opinion, the honest brisk Fellow, who drives my Plow, in an old, dirty Coat, may as well become my Coach-Box in a good Livery; And that I may look for faithful Service, and Obedience, with far less Danger of a Disappointment, among such poor Men's Children, whom I educate at once to Labour, and Attendance, than from a Crew of idle Dissolutes, who, measuring a Master's Goodness, by his Easiness, or his Extravagance, are contented in my Family no longer, than I can resolve to wink, and let them cheat me.

However, let the Gay indulge their Vanities: 'Tis but resting satisfied with an Estate, by so much lower than their Neighbours, of another Temper, as their Equipage appears above him. If they but encrease their Fortune, 'tis an Insolence to question how they

they use it ; and the Industry, requir'd in this way of getting, is thus far less irksome, than in any of the usual Paths of Life, that you may take your Swing of Pleasure, and yet fear no Ruin :—*London*, and her various Amusements, may engross your *Winters*, while your *Summers* are devoted to your Country Tasks, not less adorned with Beauties, and Temptations, though of another Nature.

I must here look back upon the Owner of those hundred Acres, which I supposed thrown into his Hands, and tempting his Endeavours to improve their Value. This Gentleman, pursuing the Advice of his Tenants, lays twenty Load of Dung upon an Acre, and sows Wheat for the first Crop.—His Expences stand thus.

[130]

Dunging 100 Acres, with	<i>l.</i>	<i>s.</i>	<i>d.</i>
20 Load on an Acre,			
each Load 1s. - -	100	00	0
Twice plowing each Acre,			
at 4s. each Plowing	40	00	0
Ten Shillings an Acre for			
the Seed Wheat -	50	00	0
Weeding, Reaping, Bind-			
ing, at 5s. an Acre -	25	00	0
Repairing Fences, Inning			
Harvelt, &c. at 6s. an			
Acre - - -	30	00	0
Thrashing the Corn, at 7s.			
6d. an Acre - -	37	10	0
	<hr/>		
	282	10	0
	<hr/>		

Now, nothing can be more demonstrable, than that this Gentleman, in laying out two hundred, and four-score Pounds, spends sixty, at least, more than is needful; for one hundred

dred Acres is no more than two Oxen can very well manage, and the Team may be guided by one Man : I know, I am out of the common road, but no Matter ; what I say has been proved on the heaviest Land, in *England*.—A good Yoke of Oxen will cost him about eight Pound, and require three Pounds worth of Hay, to help out their Grass-feedings ;—A Plow, Harness, and the necessary furniture of a Team, with other Tools, and Instruments, the Man may want, will be three Pound more : The Wages of this Man may be five Pound a Year, and his Meat, and Drink, though a very Trifle in a Gentleman's Family in the Country, we will reckon six Pounds more. All this amounts to but five and twenty Pounds ; and, for this Charge, the Owner of the Ground will save thirty, or forty Pound, in the carrying out his Dung ; fifteen, in the

two Plowings, and, in the Fencing, Weeding, Reaping, Thrashing, and other Charges, at least so much more, as amounts to the Sum above-mentioned.

I will now undertake to demonstrate, how any Gentleman in *England*, whose Estate is mortgaged, tho' for above half its Value, may clear the Debt, by the first Year's Improvement, and, at the same Time, raise the Rents to thrice their present Income. I am sensible, there is a very material Difference in the Situation, and Condition of Lands, but I will obviate that Objection, by making Choice of the most *ordinary* Sort, supposing it will be readily allowed, that what the Worst can do at all, the Best can do more easily.

Let the supposed Estate be a thousand Pound a Year, and mortgaged for ten thousand Pound, and suppose
it

it too, at six per Cent : the Interest of this is six hundred Pound a Year ; and which is, indeed a very great Hardship, the Person, who thus receives the best half of the Estate, receives it *Scot-free*, as the Proverb says, while He, who pays away the largest Part of his Subsistence, pays Taxes for that very Payment ; and 'tis well, if two hundred Pound a Year excuses him ; so that the poor Gentleman, who passes for the Owner of a thousand Pound per Annum, and must live, and educate his Children accordingly, does, in Reality, receive scarce two Tenths of the Estate, for his own Share.

In this Condition, what shall he do ? He is already a *Husband*, and a *Father* ; He cannot, therefore, hope a Remedy from the common Practice of tying one Knot to untye another ; He is unqualified for Court Attendance,

or, perhaps, too wise to risque his Ruin in a Disappointment. He cannot *buy* a profitable Post, and wants an Interest to get one *given* him: What Course shall he take? To continue, as he is, were mean and miserable—And how to better his Condition, He is wholly ignorant.

At last, it enters his Imagination, that his Land may be improved, if he had it in his own Hands: He computes the Charge, but knows not how to get so large a Sum together: However, He tries the Force of his Credit in every Place, he can expect Success from: He obtains as much, as he can, by this means, upon the best Security he can make; his Friends assist him with a little more, and, when he finds, he has a Prospect of becoming able to go through with the Design, he warns his Tenants out, and puts himself in Readiness.

If

If this prudent Resolution be accompanied with a Skill sufficient, he will first consider the Quantity of Land he is about to undertake, and what different Operations will be requisite, for the different Natures of his Soil. —But I will suppose it all alike, and all of the worst Sort ; such as having been let to Tillage, and occupied by Tenants at will, at about five Shillings an Acre, has been only qualified, by lying fallow one Year, to bear a poor Crop the next ; and, by this Account, the whole will consist of four thousand Acres.

The great, and most necessary Consideration, here, will be what kind of *Manure*, and what Quantity of it must be used, as also how to find it. He is skilled in the Knowledge, which will be taught you by and by, in the Discourse of *Soils* and *Composts*, and needs not, therefore, be informed,
that

that so large a space of Ground must yield, in several Places, plenty enough for Digging——(mark this single Advantage of Skill;—A Man who knew it not, must buy Dung, and that Charge only wou'd make two, or three thousand Pound odds, in his Reckoning.)——Let us imagine then, for the further Demonstration of this Argument, that *Marle*, because that Manure is by much the most costly to lay on, is what he finds, and resolves to use, after the Rate of a hundred Load upon an Acre.

For every hundred Acres he must provide a Team of two Oxen, and a Plowman, to turn up the Ground twice; once before the *Marle* is laid on, and once after: This Man, by the use of a Plow, hereafter described, can manage two Acres a Day, so that, reckoning two hundred working Days between *Lady Day*, and the end of
October,

October, he will have time to spread the Marle in an Afternoon, which is brought on in the Morning, and to Harrow the Ground he has Plow'd, sow the Seed, and do all that depends upon this Part of the Labour.

Besides this, there must be, for every hundred Acres, two Drivers, two Teams, of three Oxen, each: Three Carts, to carry Marle; and a Digger, at the Pitt, who fills one Cart, while the Teams are drawing the others to the Place of Delivery: This Filler, by the assistance of the Drivers, can easily send out fifty Load a Day, or more, were it requisite: But that is the exact Number necessary to compleat the Task, in the time above limited.

When the Ground is thus enrich'd by *Marle*, or any other good Manure, He will sow *Wheat*, and the whole Expence will be as follows.

Eighteen

Eighteen Months Wages to 40 Plowmen, each 5l. per Annum - -	300 0 0
The prime Cost of 40 Teams, 2 Oxen in each	320 0 0
For Plows, and Harnests, &c. for these Teams -	100 0 0
For 120 Carts, Spades, Tools, and other Utensils	400 0 0
Eighteen Months mainte- nance for the 40 Plow- men - - -	300 0 0
Six Months Wages to 120 Drivers, and Diggers of Marle - - -	300 0 0
Six Months maintenance for the same - - -	300 0 0
For the prime Cost of 80 Teams of Oxen, Three in a Team - -	960 0 0
Additional Expences, which may casually arise from	fuch

such a new Number of		
Dependants	- -	150 0 0
For eight thousand Bushels		
of Seed Wheat	-	2000 0 0
		<hr/>
Total Expence		5130 0 0
		<hr/>

If any Body objects, that this is not the whole Expence, because the Charges of Reaping, Thrashing, &c. are not included, I answer, that the *Autumn* before this Work is begun, the Owner of the Land should chuse about forty, or fifty Acres of good Ground, whether his own, or to be rented; and, breaking it up, and burning, as hereafter is describ'd, sow it with the Seed of right *Flanders Clover*: This will grow up against Spring, to a full Capacity of serving all his Cattle the whole Summer; And, when the Marling Teams have done their Work, they may be fed up, upon the Clover, till

till they are fit for Slaughter, and sold for, at least, fifteen hundred Pounds, tho' their prime Cost was not two Thirds of the Money: And this additional Sum will be more than sufficient for all the objected Expences of the Harvest.

I have reckon'd this Charge by much at the largest, and I chose to do so, to prevent the Cavils of the Slothful, or Conceited.—There are Methods, which are daily practised, whereby a Man might save by much the largest Half; but this wou'd gain Belief with so much Difficulty, that I studiously avoid any more, than the bare Mention of a Thing so seldom heard of.

Well! the Labour, and the Charge is over: Let us get in Harvest.—'Tis done; the Wheat is thrash'd, and what do you imagine is the Product of an Acre?—You wou'd think me
mad,

mad, to talk of five and twenty Pound, so I forbear what *may* be, and since I am driven to plain what *must* be, will content myself to take the *odd five* only. This no Man alive dares contradict; and even by this Calculation, the Produce of the four thousand Acres will be sold for twenty thousand Pound. The Mortgage is paid; the Money borrow'd, for this Work, is joyfully return'd; the Gentleman has two, or three thousand Pound in his Pocket, and his Ground is so much better'd by the Marle upon it, that, if he is not tempted, by the issue of his first Endeavour, to keep it under his own Management, he may let it out, and chuse his Tenants; and his Thousand Pound a Year will certainly be three, or four Thousand, from that Day forwards.

But, because the Nature of Things is best known by Comparison, I will
give

give you the Copy of a Letter, which was sent to a Friend of mine, by a Gentleman, to whom he had communicated a Design, of endeavouring to improve his Estate; and which prov'd the happy means of rivetting his Resolution.

“ S I R,

“ I receiv'd yours a Week later than
 “ you may have imagin'd, which was
 “ occasion'd by an accidental Journey
 “ to my Sister B—s; I had otherways
 “ made no delay in answering, and
 “ the rather, because the Subject of
 “ your Letter pleases me.—It wou'd
 “ rejoice your Father's Heart, cou'd
 “ he revisit Life, to see you begin so
 “ early to grow wise.—God has given
 “ you a strong and healthful Body,
 “ and a Mind unimpair'd by the influence of Age, or Sicknefs: These
 “ were Blessings, your good Father
 “ wanted;

“ wanted ; and he has often lamented
 “ the Misfortune to me, because it
 “ render’d him unable to improve an
 “ Estate, which he was griev’d to
 “ think must descend to a Son, so
 “ much belov’d, with a Clogg, he was
 “ afraid, wou’d hinder you from its
 “ Enjoyment.

“ I am well pleas’d to hear, that
 “ your Uncle G— is so good natur’d
 “ to consent to do, as you inform
 “ me.—You shou’d have found the
 “ same Compliance in me, rather
 “ than I wou’d have seen so excellent
 “ a Design overthrown for want of
 “ Power to finish it ; and pray, take
 “ a Friend’s Privilege to assign me my
 “ Part, in the Furtherance of your
 “ Endeavours.

“ And, whereas you ask my Coun-
 “ sel in the Matter, I give it very
 “ gladly, and with great Sincerity ;
 “ put your Hand to the Plow, and
 “ draw

“ draw it not back, because your Mea-
 “ sures are the wonder of your Neigh-
 “ bours. No Man had more of That,
 “ than I, when I begun this way.
 “ Indeed, you are better arm’d against
 “ Remark, and Ridicule: I had no
 “ Land of my own to improve, and
 “ a sorry Stock, God knows, to set
 “ me forward.—Your Father has oft
 “ heard me own, and I am far from
 “ being asham’d to confess it publicly,
 “ that two hundred Pounds was all,
 “ which had been sav’d me from the
 “ Wreck of a very considerable For-
 “ tune: But my Genius always led
 “ me to a Desire of being settled in a
 “ Country way; and a Book of Mr.
 “ *Hartlib’s*, call’d the *Legacy of Husban-*
 “ *dry*, (which Book, by the by, I wou’d
 “ advise you to read,) had possess’d
 “ me with a Notion, that great Things
 “ were to be done in that way; But
 “ the Practice of the Law, to which
 “ I

“ I had been Educated, and by which
 “ I made a shift to eat, and drink,
 “ Three Pair of Stairs high in Lyon’s
 “ Inn, allow’d no Leisure, or Ability,
 “ to put my Inclination to the Tryal
 “ of Experience. But, at last, when
 “ it pleas’d God, my Mother died,
 “ and the two hundred Pound, a Sum
 “ the Profits of the Law had never
 “ shewn me, as little as it was, be-
 “ came my own, I made a Resolution
 “ to pursue my Wishes.

“ I took a little Farm of twenty
 “ Pound a Year, and became Master
 “ of a Man, a Maid, and a poor Beast,
 “ or two, which was all my Family;
 “ I had like to have spoil’d all, by
 “ venturing too far at first, but with
 “ much ado my Stock held out, and,
 “ when I cast up my Account at the
 “ Year’s End, I found all Charges
 “ paid, and about five hundred Pound
 “ in my Pocket.

G

“ My

“ My Cottage was now become too
 “ narrow for my Ambition, and I be-
 “ gan to form strange Schemes of
 “ growing, in Time, to be a mighty
 “ Man. I think, it was *Cæsar* who
 “ us’d to say, He wou’d not entertain
 “ a common Soldier in his Army, who
 “ did not absolutely hope to see him-
 “ self a *General*. And I assure you,
 “ that a worthy manner of *aspiring*
 “ even among us *Rusticks*, is the surest
 “ Tie upon our Diligence, and In-
 “ dustry; we pursue a Labour with a
 “ double Eagerness, when it offers
 “ pleasing Prospects to our Hope, and
 “ cannot easily be tir’d, if we always
 “ keep in view the point of Happiness,
 “ we aim at reaching.

“ But I wander from my little Farm,
 “ which I exchang’d for one of fifty
 “ Pound a Year, and which contain’d
 “ about two hundred Acres. I made
 “ my augmented Stock hold out to fit
 “ the

“ the Ground for bearing Wheat;
 “ and this Year, I clear’d above twenty
 “ Pound an Acre, to my own Amaze-
 “ ment at the unexpected good For-
 “ tune, and the Rage, and Envy of my
 “ Neighbours, who had banter’d my
 “ new Methods of proceeding, and
 “ cou’d not bear to see the Jest, thus,
 “ turn’d upon them.

“ I now look’d upon myself as a
 “ *made Man*, and, having jump’d, as
 “ it were at once into Plenty, I resolv’d
 “ to pursue the Game at all Advan-
 “ tages; I increas’d my Quantity of
 “ Land in proportion to my Stock,
 “ which I more than *doubled*, in a Year
 “ so very hurtful and unseasonable,
 “ that it ruin’d many Farmers of con-
 “ siderable Substance, who had not so
 “ much Skill, or so much Luck, as
 “ myself.

“ By this Time, I began to think
 “ of Marrying, for I found myself in

“ a Condition to admit of chusing
 “ Merit without Money ; But I had
 “ the good Fortune in my old Girl,
 “ who, by the way, is much your
 “ humble Servant, to meet with an
 “ admirable Mixture of both these
 “ Blessings. And I now, thank God,
 “ improve an Estate of my own ; and,
 “ in all the Practice of my Life, have
 “ had such Proofs of an infallible Re-
 “ ward of Industry, in this honest
 “ way, that I cannot help rejoicing,
 “ in a more than ordinary manner,
 “ to see the Child of my Friend so
 “ likely to be made at once, a *good*
 “ *Man*, and a rich Man.

“ I wou’d answer all your Queries
 “ in particular, but have writ so much
 “ already, that I have no Room. And
 “ your little Wife says, if you want a
 “ Letter from her Father, you may
 “ come yourself, and fetch it : I ex-
 “ pect to see you here ; you know you
 “ are

“ are always welcome ; and, against
 “ you come, I will prepare a Paper
 “ of Directions, which you may, here-
 “ after, have occasion to thank me
 “ for. I am, &c.”

I have inferted this Letter, as a Proof, that what I am advising has been found very possible ; and indeed, if Men wou'd suffer themselves to be convinc'd either by Reason, or Experience, they wou'd meet, in their pursuit of Wealth, this way, no Obstacle, but Sloth, between their Aim, and their Accomplishment.

Now, because I wou'd leave nothing unsaid, which may be serviceable in the Practice of what I am recommending, I will, as briefly as is possible, describe the proper manner of proceeding, not as *is* done, but as *shou'd* be done by skilful Undertakers. I shall not lead you thro' a Field of Intricacies,

tricacies, and distract your Imagination with a croud of Precepts. The utmost Knowledge, necessary to the End I have propos'd, may lie in a very little Room, and I will endeavour to give it, at one View, as nearly as I can.

I begin with *Manure*, that necessary Help to Vegetation, and *primum Mobile* of all Improvements.—There are many excellent Kinds, such as *Shavings of Horn*, *Choppings of Rags*, the *Comings*, or *Dust of Malt Heaps*, *Pigeon's Dung*, *Soap Ashes*, *Lime*, and others: All which are wide of my Purpose, because they must be *purchas'd*. I, therefore, only mention them, and pass them by, to treat of such, as, being every way superior to them in their Operation, are also to be had at no other Expence, than that of *Carting*. These are *Marle*, *Chalk*, *Fullers Earth*, *Clay*, *Sheeps Dung*, *Sea-owse*,

owse, River-mud, Sea-sand, and Sea-weed.

It is to me a surprizing Proof of our Gentleman's Inaptitude to this noble Art, to see so many hundred thousand Acres pester'd, and corrupted, by *common Dung*, the Bowels of which very Land are loaded with inexhaustible Quantities, of rich, and wholesome Physic, for its own Diseases.—*Dung* is not only prejudicial to *some* Soils, but inferior to the worst of other Composts, upon *any*. One wou'd wonder to see, how People put themselves to extraordinary Charges, and the Inconvenience of sending to great Distances, for *Lime*, or *Horse Dung*, to Manure those very Lands, which never fail of being verg'd, or bottom'd by a Substance, of one kind, or other, by far more proper for the End, they aim at: And, therefore, I lay it down as a Rule, almost without Exception,

that, as every *Climate* is suppos'd to produce naturally, were the Virtues of all Simples known, unquestionable Cures for the Diseases it is subject to, so every *Soil*, of what Nature, Situation, or Condition soever, abounds with natural, and sufficient *Helps*, for its peculiar *Imperfections*.

The only Difficulty is, how this Treasure shall be discover'd, and applied, and I will make both these alike easy to your Practice—I begin with *Marle*.

There are many different Kinds and Colours, severally distinguish'd by many Writers; but their Virtue is the same; and they may all be us'd upon the same Ground, without the smallest difference in their Effect.—I have seen nine several Sorts, within a very small Compass of one Gentleman's Lands, and am pretty sure, there are few Vallies, Sides of Rivers,
or

or hanging Grounds in *England*, but abound in one or more Kinds of this incomparable *Manure*.

In many Places, it discovers itself to the most negligent Eye ; especially, upon the Sides of broken Hills, or deep hollow Roads, as you travel through most Counties, in the Kingdom.—The *Thames* possesses an inconceivable Treasure, on both her Sides, which is plunder'd, more or less, by every Tide, and may be seen, as you pass in Boats along her Banks, both above, and below *London* — *Boggy Lands* frequently cover it, and, in such, it seldom lies above three Foot deep ; 'tis somewhat lower, under stiff Clays, and *marshy level Grounds* : Most *Sandy Lands* abound in it, in their lowest Places, at sometimes three foot Depth, and sometimes seven or nine, and I have known it deeper. As for the Marle itself, 'tis seldom you can find its Depth, for, when

the upper Crust of the Earth is once remov'd, all you can see, or dig, is *Marle*, and I cou'd never yet see any Pit exhausted.

There is nothing more common, in most Places, than to find the Ditches which enclose a Field, dug down so deep, that they have penetrated six or seven inches into a Bed of *Marle*, that lies under them, without knowing any thing of the Matter, tho' the prodigious Shooting, and Encrease of the Grass, which is put forth by the *Marle*, thrown up upon the Sides of the Bank, might one wou'd think, be a means of discovering it; for tho' the Dryness of such Banks, in other Places, do not only make them unfit for bearing kindly Grass, but apt to moulder down in Summer, and wash away with Winter Rains, yet, where the *Marle* is thus, by Accident, disclos'd, it does not only turf the Sides, and Tops, of the Banks,
and

and so secure it against all Injuries of Weather, but causes the Grass to grow to such surprizing Length, and Thickness, that, being beaten down by Winds, it hangs along, as if it *thatch'd* the Earth, which nourish'd it, and carries off the Rain, without permitting any considerable Quantity to enter through it.

The Colour is, either *red, brown, yellow, blue, grey,* or *mix'd*; it is to be known by its pure, and uncompounded Nature; there are many Marks to distinguish it by; such as its breaking into little square Bits; its falling easily to Pieces, by the force of a Blow, or, upon being expos'd to the Sun, and the Frost; its feeling fat and oily, and shining when 'tis dry.—But the most unerring way, to judge of *Marle*, and know it from any other Substance, which may appear like it, is, to break a Piece, as big as a large Nutmeg,

and when 'tis quite dry, drop it to the Bottom of a Glafs of clear Water; where, if it be right, it will diffolve and crumble, as it were to Duft, in a very little Time, fhooting up many Sparkles to the furface of the Water.

Wou'd you learn a very eafy, and infallible Method of difcovering, whether there is any *Marle* in Places, you imagine it may lie under?—Order a *Smith* to make three *Iron Augers*, of near an Inch Diameter, and to each, affix an Iron Handle, crofwife; let the Bitts of thefe Augers be made pretty large, and tenacious of what they pierce; the firft may be *three* Foot long, the fecond *Six*, and the third *Ten*. When you wou'd try the Place you have Hopes from, carry thither thefe Augers, and caufe a Servant to take the firft, and wring it into the Earth, by twifting at each End of the Handle. He muft draw

draw it out as often, as it has pierc'd a new Depth of six Inches, to cleanse and examine the *Bitt*, and observe, what he draws up in it.—If you find nothing but common Earth, within the reach of this first Auger, let him thrust the second down the *Hole*, which was made by the former, and proceed in the same manner, till he has wrung This, also, up to its Handle ; and then let him do the same by the third Auger, always remembering, that he examines the Auger *Bitt*, after each new Progress of six Inches.

By this means you will undoubtedly, and without Charge, or Hazard, discover not only what *Marle* lies under your *Soil*, but whether any other Thing of Value, such as *Chalk*, *Coals*, *Fullers Earth*, or *Quarries of Stone*, many of which lie now conceal'd, and unthought of, in Places, where their Value, was it known, is ten Times more than That of the whole Estate,
which

which covers them; and here, I can't help telling you a Story, which, tho' it may look like a Digression, makes much for my present Purpose. •

A *Dutch* Ship was cast away upon the Coast of *Norfolk*; nothing was sav'd, either of the Vessel, or her Crew, but one poor Sailor, who had made a shift to get a shore upon some Member of the Wreck, and crawl'd along, half dead with Cold, and the Fatigue of his Deliverance, to the House of a *Farmer*, who liv'd not far from the Sea Side. It was in the heat of the War between Us and *Holland*, and the good Man of the House, understanding that he was a *Dutchman*, imagin'd, 'twould be little less than high Treason, to entertain him; by which means the poor Fellow, going on, in Hopes of better Fortune, was reduc'd to the necessity of taking up a good warm Coat, which he found upon a Gate,

as he went along, and withdrew to a little *Copse*, with design to Shift, and dry his old Cloaths, and then to leave the Coat in the Place where he found it. The Owner of this unlucky Garment was a *Ditcher*, who, being at Work on the other side of the Hedge, had observ'd this Passage, and pursuing the *Sailor*, overtook him, before he got to the *Copse*: and, not being able to understand his Excuses, for want of skill in his Language, wou'd needs carry him before a *Justice*, who liv'd hard by: The Justice had Knowledge enough, in the *Dutch* Tongue, to unriddle the whole Affair; took Pity on the poor Man, and putting him to Bed in his own House, gave him a Suit of Cloats, the next Day, and was preparing to send him to a Place, where many of his *Countrymen* were Prisoners, expecting daily their Freedom. In the mean while, understanding that
 he

He had Skill in *Draining*, he carried him one morning into a Field, in which he had begun a Work of that Nature. The *Dutchman* perceiv'd a whitish kind of Earth, which had been cast out of one of the Trenches, and examin'd it with more than ordinary Earnestness. The *Justice* ask'd him, if it were of any valuable use in *Holland*? The *Sailor* answer'd, that it was sold in his Country, at an extraordinary Rate; that it came to *Delft*, and other Places, down the *Rhine*, from a little Village about twenty Miles above *Frankfort*, and was us'd for making the finest sort of *Earthen Ware*. The Justice upon the Information thus accidentally given him, immediately, after Conclusion of the Peace, sent a Person to *Holland* with a *Sample*, and, finding the Matter exactly, as it had been represented, by his Shipwreck'd Guest, became a Merchant unexpectedly,

tedly, by this Product of his own Land, and sold so much, in a few Years space, as brought him in ten thousand Pound Profit; but the Stock was then exhausted; and he cou'd discover no more, in any Part of his Estate, tho' he earnestly endeavour'd it.

But I return to my *Marle-Pit*; and have only to add, that there is, now and then, an Inconveniency attending such who dig too deep in level Lands, inclinable to Wetness in the Winter; for the *Springs* will, sometimes, break in upon your Pit, and much encrease the Labour of your Workmen, and your own Expences. There are little Engines to be made, which, turning in a semicircular Frame, will catch the Wind at every Point, and, by the Force of their Motion, pump up mighty Quantities of Water, and, by that means, ease this Inconvenience, which,

which, however, had much better be prevented ; and that may infallibly be done, by working *Wide* and *Shallow*, in such Places, as you suspect to be Watry.

I come next to *Chalk*, which, tho' not so general as *Marle*, is yet very easy to be found, in many Places, where 'tis never sought for. This is a Thing so universally known, that I need not go about to describe it ; only, as it is the *Heart* of many Hills in *England*, whose *Surfaces* discover nothing like it, I would advise a diligent Search for *This*, where *Marle* is wanting. The Augers will be, here, as necessary, as before ; the Places, to be pierced, are only *Tops*, and *Sides* of Hills. If you succeed, you need not dig a *Mine* in the laborious Manner, which is commonly practised ; the following Method is a cheaper, and far more expeditious way.

Pretty

Pretty near the *Top* of the Hill, (more or less so, as the Hill is high, or low) you must make your Workmen cut a deep Hollow into the Side, as if they would undermine it ; which having done, they must, upon the *very Top* of the Hill, dig a deep, narrow Trench, -as directly over the inmost Part of the Hollow below, as they can possibly: This Trench they must contrive to fill with Water, by cutting little Channels, to lead Floods into it from all the higher Parts of the Hill's Top; by which means the next Rains, that fall, soaking thro' the exposed body of the Chalk, will at once carry down, as it were, the whole side of a Hill, which, breaking to Pieces in the Fall, may be carted in the Bottom, and carried out upon your Grounds, with abundance of Expedition.

Ful-

Fuller's Earth is found by the same manner of Search, with the two foregoing ; and, I believe, I may venture to give it, as a general Rule, that, where *Marle* is not, *Fullers Earth* is. The Places, to be examined, are the same in seeking one, as if you sought the other ; and 'tis no great matter *Which* you find, if you can come at *Either* ; for their Use, and Operation, are as near alike, as possible.

Clay is another excellent Manure, and easy enough to be found in all Places ; but you must observe, 'tis only useful upon *Sandy* Grounds, or any Lands, of a Nature entirely different from its own ; among which you may reckon *Gravelly*, or *Pebbly* Soils. To these it brings the only part of Excellence they naturally want, and consequently, changes them, from what they were Originally, to an equal Fertility with the best, and richest.

This

This will, perhaps, be strange News to many Countrymen, who have bought *Dung*, all their Life-Time, to destroy their Land with. 'Tis as great a Folly to *Dung* Grounds, which require *Cooling*, as 'twould be thought to administer *Poison*, to cure a Man of a *Fever*. Our Farmers are not sensible, that the *Temper* of the *Land* must, as necessarily, be consulted, as the *Pulse* of the *Patient*. The *Dung-hill* only is their universal Refuge; they fly to *That* upon all Occasions: They miss a Crop, by dunging an improper Soil, and lay on more *Dung*, to remedy the Misfortune.

Some few Years ago, a Friend of mine remarkably experienced the full Sufficiency of this Observation: He had a couple of Fields, divided by a Hedge only; neither of which was fit for Corn, or Feeding: He resolved to improve them both, and when they
were

were Plow'd up to that Intent, he found, that one was a hard brown *Clay*, and the other a very burning *Gravel*; He was surprized to find these diametrical Opposites, such Neighbours; and supposed, that, for that Reason, the Hedge had been formerly made to separate them. He pulled down the Division, and having laid them open, set his Men to work, on trenching them six inches deep: The Earth, they dug out of one Trench in one Field, he made them carry instantly to another Trench in the other Field, in Wheelbarrows; by this means interchangeably mingling the *Gravel* with the *Clay*, and the *Clay* with the *Gravel*.—When this was done, he had it Plow'd all over by a deep cutting Plow, and has sowed it every Season since with the richest Grains: The Effect of this is, that He has not now a finer, or more mellow Piece of Ground

Ground in his Estate : The very *Nature* of the Land is altered, and there remains no visible Difference between the two Divisions, but the whole is converted into a good *Hazel Mould*, and produces a plump round Corn, and as plentiful Harvests, as any Soil, in the Kingdom.

I distinguish *Sheep Dung* in the next Place, not as it is used in the general way of *Folding*, but as I would have it used : And, as it would produce so great an Advantage, that in a few Years, we might hope to see the bare, and open Downs of *Berkshire, Wiltshire, Dorsetshire*, and other Counties, nay, the barrenest Heaths of *Staffordshire*, and the very Mountains of *Wales* herself, become as good, and fruitful *Arable*, and *Pasture*, as they are now unfruitful *Wastes*, and *Desarts*.

These kinds of Downs, and Heaths, are commonly barren, even in the utmost

hurdled Barriers, as the *common* Folds are made of.—While they are feeding, in the Day time, let the Shepherd, instead of being Idle, by the help of a Spade and Wheelbarrow, carry into the Fold such Earth, as he can dig, in the properest Places, near it, and scatter it abroad, till he has covered, in a manner, the Dung which the Sheep had left upon the Place. This is the whole Design at one view, and this Work being daily renewed, the Sheep will lie higher, and higher, as the new Earth raises them; and, by their Dung, and Urine (the Virtue of both which are thus preserv'd from the Exhalation of the Sun, and injuries of Weather) will enrich the Soil to such a Degree, that there is nothing, which you may not Hope from it.

This Manure may, at proper Times be carried out upon the barren Lands,

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which

which may gradually be enclosed, by such Parcels, as the Fold can afford Compost for. I need say no more, the Thing will Speak itself: The Sheep's Dung is not only encreased to many times its Quantity, but also becomes a far more natural, and lasting Improvement to any Soil, it shall be used on. This Caution only is necessary, that the Dung, designed for *heavy* Grounds, must be mingled with a *light* Earth, and so the contrary; and it is for this Reason, that I mention two Folds, which Direction, notwithstanding, is to be observed, in no Place but where there are two distinct Soils, upon one and the same *Sheep-Walk*.

Sea-Owse, that is, the settling of the Tides, on Shores, and level Places, between low and high water Mark, is a Manure of incomparable Excellence, for many sorts of Lands; but is, on
others,

others, to be avoided, as a certain Bane to whatever Part thereof 'tis mixed with.—Where to apply it shall be shewn, in its proper Place, and how to find it needs not be taught such Land-Owners, who live near the Sea, and are the only Men, to whom its Benefit can reach, though, perhaps, the most unwilling to make Trial of its Virtue.

All Rivers, great, or small, abound in Store of *Mud*, which is nothing less, than the very Heart, and Fruitfulness of Uplands, washed down by Floods, and carried on by Streams, till, rolling into Rivers, it is settled on their Sides, and Bottoms, and remains an easy Prize to the Industrious, whose Labour it repays a hundredfold; and is of infinite Advantage, and yet every where neglected. I might say the same of cleansing of Fish Ponds, and the bottom of Marsh Ditches, which

which is, also, of extraordinary Emolument to Men, who have Skill to hit the Quantity, and apply it rightly.

When I spoke of *Sea-Owse*, I should also have mention'd *Sea-Sand*, to which not any of the former is preferable. This is a valuable Fund of Plenty, which, though surrounding us on every Side, is only made use of in one Corner of the Kingdom.—I could tell almost incredible Examples of what Men might expect, from an Improvement of their Lands this way; nor is it any particular kind of Sand, which may be thought endued with a peculiar Efficacy, but every common Part of that vast Sea Shore, whereby we are encompassed.

There is yet another Friend to Vegetation, which the Sea indulgent to our ungrateful Soil, throws in upon us; and which we leave to be regorged by every returning Tide.—

I mean a certain floating Substance, which is torn, by the force of Waves, from the sides of Rocks, on which it grows, and lies in great Quantities upon the Coast. It may be found in all Creeks, and Rivers, to which the Sea has Entrance, and is commonly call'd *Ore-Weed*, and by some *Sea-Weed*. It is of wonderful use upon most Lands, and deserves a far greater Value than we put upon it.

And now, I think, 'tis almost demonstrable, that there are very few Estates, in *England*, so unhappily situated, but that some *one*, of the above-mention'd *Manures*, may be found about it. But, because it may be ask'd, if I wou'd utterly banish the Use of *Dung* from among us, I answer, *No*:
 —But will endeavour to direct a means, whereby it may not only be us'd with much less Danger, than at

present, but to many Times the Profit, which it now produces.

Along the Back of your Stable, cause a Pit to be dug, to the Depth of the Foundation, or a pretty deal below it; let it be as long, as the Stable, but its Breadth shou'd be according to the Quantity of *Dung*, you have Conveniencies for making: Let this Pit be arch'd with Brick, but very slightly, and an Entrance left at one End, which may be shut up or open'd by a wooden Door: Let the Sides, and Bottom be firmly lin'd with Stone, and closely plaister'd over with a Cement, which will by no means admit Moisture.

Through the Wall of this Stable, and about a Foot or more from the Ground, let there be made square Holes, which opening into the Stercorary, from within the Stable, must be of sufficient Largeness for the Passage of the *Dung*, that is, from Time
to

to Time, to be Shovell'd through them.

The Stable Floor shou'd be made as smooth and hard, as possible, that the Urine of the Horses may not soak into it, but, descending from them to a little Gutter, close along the Wall, thence run through Passages, which are purposely to be made, into the Stercorary.

Pipes of Earth, which will cost but little, shou'd be laid, from this Place to the *Cow-house*, *Hog-sties*, and *Privies*, that all *Urine* of Man or Beast, of any kind whatsoever, may immediately be convey'd to mingle with the other. Into which must be cast all *Ox Dung*, *Cow Dung*, *Hogs Dung*, and *Dung* of *Fowls*; all *Ashes*, whether of Wood, or Sea-Coal; the Dust, and Sweepings of your Yard, and House; all *Weeds*, old *Litter*, rotten *Straw*, and spare *Earth*, which you can get;

as also the washing of *Barrels*, all *Soap-Suds*; *Water*, which *Meat* has been boil'd in; *Disb-Water*, and every such kind of Thing, which is now thrown down the common Sink, and render'd Useless: And, for the more convenient Performance of all This, there may be left a pretty large square Hole, in the *outward Declivity of the Arch*, which covers the Stercorary: This Hole must have a wooden Door fitted to it, which, lifting up and down, will, as occasion offers, not only serve for taking in the Things above nam'd, but, whenever more Moisture may be thought wanting, it will admit as much, as is convenient, by being left open in rainy Weather, and, as soon as shut, forbid the Entrance of any more. The other Door, which I spoke of, in one of the Ends, is only to serve, for carrying out the *Dung*, when it is to be made use of.

In

In such a Stercorary, as is here describ'd, the Charge is a Trifle, not worth naming, in Comparifon with the Profit. The Dungs, and other Things, incorporating, and fermenting thus together, mellow'd and enrich'd by the Spirit of the Urine, and unimpair'd by the Sun, Rain, or Wind, attain an Excellence which is beft known by the prodigious Encrease, they make in your Crops; and which demonftratively proves, that *one* Load, thus manag'd, is of more Effect, than *twenty* after the common manner.

I may reckon *Burning* of Land among *Manures*, because it is a very great Improvement, and only practis'd upon some old *Pasture*, or *Heathy*, *Rusby*, *Broomy*, and fuch like barren Grounds, which are greatly enrich'd by it; though, for want of one Obfervation, Lands, fo improv'd, are generally

ruin'd in the common Practice of Plowing them, three or four Crops, successively; by which means their whole Fertility is most assuredly exhausted, and the Soil becomes incapable of Vegetation, though assisted by the richest Dung, or other Manure, in the World. Nothing, but ten, or fifteen Years Repose, will restore the abus'd Vigour of Nature; whereas, were these Grounds strengthen'd by a little *Marle*, *Chalk*, or *Dung*, between their first Harvest, and their second Seeding, the Improvement wou'd be made compleat, and lasting: No Method wou'd be more easy, nothing possibly more advantageous.

The manner of burning Land is generally known to be a pairing off the fibrous Turf, to a considerable Depth, in a hot Season, which being made into little Hills, rais'd hollow, and at equal Distances, are set on Fire,
as

as soon as they are dry enough to kindle, and so burnt to a kind of red Ashes; and those Ashes scatter'd over the whole Surface; the Ground is then plow'd up very shallow, and the Seed immediately sown.

This burning of Ground is very costly, and not a little tedious, because the Turf is rais'd in a laborious manner, by the Force of a Fellow's Arms, and Bosom, pushing against a Thing they call a *Breast Plow*.—I will present you with a much neater Invention, and which saves, at least, two Thirds of the Charge.

Let some *Smith* in your Neighbourhood, who is a ready Workman, make a hollow Plow share, of a double Form, that is, one which rises with a sharp Edge in the middle, from the Point to the Top, and has a *Fin* both ways; which Fins must also begin at the Point, and so run back to the share

End. The Dimensions of this Share will be two Foot broad, from the extreme Points of the Fins behind ; one Foot long, and a Foot high, somewhat like a three-edg'd Sword, if it were cut off a little above the Point. The three Fins, or Edges must be very well Steel'd, and the whole made as thin, and as smooth, as you can get it done.— Into the hollow of this Share must be fasten'd a light strong piece of Ash, sharpen'd *forward*, to fit the Bosom of the Share, but *behind*, as square, and sturdy as may be. Into this last Part must be fix'd a strong piece of Wood, like a *Lever*, not perpendicular, nor very far from it, but somewhat hanging backward : It must be about two Foot high, and on the upper End, shou'd have a cross Staff, or other Contrivance, to which must be fasten'd the Harness of such Cattle, as your Team consists of. The Handles of the Plow,

Plow, and the *Earth-Boards*, to turn the Turf, are also fix'd into this square Head; and, there is no manner of Instruction necessary for the use of this Plow, but that, when you begin upon the Edge of a Field, and turn one Turf to the Hedge, and the other to the Field, the last will cover one of the Breadths you must take at your coming back, and the Point of your Share must, therefore, run close along the Edge of this length of Turf, by which means one side of your Plow will raise two Lengths, and, throwing back the highest, lay that uppermost, which had before lain under: And by this one Observation, you cannot miss the manner of Plowing.

But, because this wou'd only raise a long unwieldy *Rope* of Turf, which it wou'd be necessary to cut into many hundred Pieces, before it cou'd be fit for *Piling*, you will find the following

In-

Invention of admirable Use and Expedition.

Chuse the Body of a short thick Tree, the heavier, and more solid, the better; let it be neatly rounded, and work'd into a *Roller*, like those, we use for levelling our Barley Lands. This Roller must be hoop'd round, in six several Places, each two Foot distant from another; the Hoops must be of strong Iron, and nail'd very firmly on.—The middle Part of every one of these Hoops must rise into an Edge, to about five or six Inches above the Level of the Hoop itself; these Edges must be very sharp, strong, and well steel'd, that the Weight of the Roller, as it goes round, may not fail to press them all into the Earth, as deep as they can go, and yet not damage them, either by blunting, bending, or breaking.

One

One Horſe will very well draw this Roller, with which you muſt go over the Ground, you intend to burn, the contrary, or *Croſs* way to that, which you deſign to take with your Plow, before deſcrib'd; which will by this means, turn up the Turf, in Pieces of two Foot long, and one broad, the exact ſize, they ought to be, to form the little Hills above-nam'd. I have nothing to add upon this Head, but, that Thoſe, who praſtiſe it, had need be careful how they *over burn* the Turf, which wou'd, in that Caſe, be robb'd of much of its Fertility. A gentle Fire, not flaming out, but mouldering inward, is the ſureſt means of hitting the Perfection of this Work.

I have now provided a ſufficient Store of Manure, and come next to conſider, how to plow the Ground, on which it is to be beſtow'd; and, this Work finiſh'd, I will wind up my Directions,

rections, in as narrow a Compass, as will contain them.

There is no occasion for more *Plows*, than two; one for a *hard*, or *heavy* Soil, and the other, for a *light*, or *mellow*. There are, in *England*, above a hundred several sorts of *Plows*, and all bad: It is surprising to see the Toil, and Charge, some People put themselves upon, for want of a complete Knowledge in the *make*, and management of this useful Instrument.—I have seen eight Oxen tack'd to a *Plow*, which the weakest Beast in the Team wou'd have easily drawn, in a Soil much heavier.—I distinguish the only two *Plows*, worth using, by the Names of the *Strong* and the *Light*.

The *strong* *Plow* is to be us'd on all *hard* *Clays*, *stiff* *binding* Soils, and *stony* Grounds, or any Lands of a *repulsive*, or *sticky* nature.—It is drawn by *two* *Oxen*,

Oxen, nor are more, at any Time, necessary. The Description follows.

Let the length of your Share be a Foot and a Half, the Point indifferently sharp, but very strong; let the Shelving-side be work'd thick, and without a *Fin*, but steel'd all along its Edge, from the Point to the hinder Part, where its perpendicular Height must not exceed six Inches.—The Breadth must be just sufficient to carry a Furrow, seven, or eight Inches broad. In this Plow, the Place of the Breast-board must be supply'd by an Iron Plate, which, joining to the Share, and being Part of it, is, in a bellying manner, carried back, and gradually brought to *Whelm*, as if it wou'd fall upon the Furrow. This Plate, being made as thin, as its Use will permit, is supported by a Pin from the Plow-Head, which is, in all Respects, the same with that of the Plow, which I
just

just now recommended, for paring up the Turf of Lands to be burnt.—

This Breast Iron, with all the Neatness and Facility imaginable, takes the Earth, as it rises on the Share, and, without labouring under the Load of a long Furrow, turns it over, as it runs along, and neither toils the Oxen, nor the Driver.

One Man is enough in all Reason to manage this Plow; He guides his Oxen by a Goad, as usual; and holds the Handles with a great deal less Fatigue, than in other Plows, for they are to be set at a large Slope, and their Ends standing wide from each other, they have the greater Power over the going of the Plow: If the Share is apt to *bite*, or run too deep into the Ground, his leaning a little harder than ordinary, on the Handles, will raise the Point to what Pitch he pleases; as, on the contrary, when he lays

no

no Strefs upon them, the Team will of Courſe draw the Point downward.

The Oxen, while out of Buſineſs, may feed at large, or be uſ'd at Pleaſure; but when you work them, 'twill be neceſſary to keep them up in a Stable, or ſome Stall, built purpoſely for them.—Hay, and Straw, mix'd, is what will very well content theſe eaſy Creatures, but they deſerve to live in Clover, and pure Hay is what they will very gladly feaſt on.—Your Men ſhou'd make two Journies in a Day, let the Seaſons of your Plowing vary, as they will; the firſt, from Day Break, to eleven o'Clock, and the ſecond, from one in the Afternoon, till Night. This is what your Oxen, with the Help of their two Hours Bait, can very eaſily perform; but your Plowman, who is generally the worſt Beaſt
of

of the Three, may, perhaps, think much of his Labour.

The *Light* Plow is properly to be us'd, on sandy mellow Grounds, and all such, as are directly opposite to those, for which the *strong* Plow is recommended. It is drawn by two Horses with no manner of Difficulty; or with one, if you please, for many have try'd it.

The *Share* of this Plow is, in a manner, the Share of the *Turfing*-Plow, divided into two equal Parts. The Share of the *Light* Plow shelves only one way, as not being double, and has a *Breast-Iron* exactly like that of the *strong Plow*; in all other Respects, it is the very same with the *Turfing* Plow, even in Dimensions, and, therefore, needs no farther Description.

One Man will hold, and drive this Plow, with more Ease, than the strong one, because the Lands are more manageable.

nageable. The Reins, whereby he turns, and checks the Horses, pass through two long Slits, in each Handle one, and being just of Length enough to hang five Inches, or more, down, are prevented from being drawn back through the Slits, by two pieces of Wood, to which their extream Ends are fasten'd.

I need not tell you how the Horses shou'd be fed, and kept ; that Skill is common.—I observe only, that *Horses*, if you feed them well, are as able to go two Turns a Day, as *Oxen*. It may not, perhaps be generally known, that a Horse is apt, by rising in the Night, and falling to the Rack, to pull down and spoil great Quantities of Hay, whereby he does not only commit Waste, and Damage, to his Master, but deprives himself of that needful Rest, which wou'd have qualified him much better for the Labour
of

of the succeeding Day. You may easily prevent this Inconveniency, by emptying the Rack, at Night, by which means the Horse, when he rises, and finds his Expectation baulk'd, will content himself to lie down again, immediately, or stand, and sleep, as he shou'd do.

I can't introduce a very useful Observation in a more proper Place, than This; and that is, when the Land you are to Plow, is the side of a very steep Hill, as it often is, 'tis downright Madness to proceed, as most Countrymen do, by Plowing directly up and down the *Steep*. In this Case, 'tis Pity the Driver is not in the Place of his Team; He wou'd then perhaps, discover, that 'twould be the wisest way to plow cross the Hill, by which means, the Cattle wou'd not only draw with the same Ease, as if they work'd on plain Ground, but the
Fur-

Furrows, lying athwart, wou'd prevent the Rains from washing down the Fatness of the Soil, with every Flood, a Misfortune to which, at present, all these Lands are yearly liable, and often ruin'd, and impoverish'd by it. But, I hasten, as I promis'd, to direct to as full a Knowledge, as is necessary, in the general Practice of Husbandry, to a far greater Profit, than is now made by it.

As for the general Difference of Soils, I divide Ground into two sorts, the *Good*, and the *Bad*: The *Good*, as being such already, I intend not to discourse of, aiming only to instruct the Gentlemen of *England*, how to make the worst part of their Estates, of equal Value with the *Best*; and in the Rules laid down, in order to the attaining this End, include a practical Description of the *complete Art of Husbandry*.

Common

Common and indifferent Lands then I distinguish into *Heavy*, and *Light*, and comprehend, in this Distinction, every particular difference of Soil, which is known in this Kingdom. All deep, hard Clays, of what Colour soever; all stiff, chalky, binding Earths, and such, as after being expos'd to the Sun, or Frost, grow hard, and stony with such, as in the violent Heats of Summer, chop, and cleave upon their Surface; all these I call *Heavy* Lands, not only because of the closeness, and firmness of their Nature, but as they all hang *heavily* on the Labour of the Plowman, and his Team.

On the other side, all sandy, mouldering, gravelly, warm, mellow Soils, all loose, and open Earths, of what Nature soever; all such, as are not sticky, but will presently dry after Rain, and instead of lying in huge
Clumps

Depth of it: If you find it a good deep Mould, and cover'd by a thick, strong, fibrous Turf, such as by long lying, is become firmly rooted; In this Case, it will be much the wisest way to *burn*, and spread the Ashes, by the Rules before given, not, by any means, omitting to manure, between the first *Reaping*, and the second *Sowing*; after which you may proceed, in all Points, as if the Turf had been Plow'd in, instead of being burnt.

But if, on the contrary, you find your upper Mould shallow, or thin Turf'd, it will by no means be proper to burn it; you must, therefore, take Notice, whether your Soil be of the *Light* Kind, or the *Heavy*; if, upon examining it by the Marks abovemention'd, you find it of a *heavy* Nature, you must prepare your *strong* Plow, and Ox Team, and take Care, that, in the first breaking up, as they call it,
your

your Plowman turns the Turf side neatly downwards, and lays his Furrows so smooth, and close together, that, at a little Distance, a Man can scarce see where the Plow went. An Acre, and a half may easily be Plow'd in one Day, by the use of this Plow, so that, beginning by the first of *April*, and allowing for *Sundays*, and accidental Hinderances, the hundred Acres will be all broke up, by the middle of *June*, at farthest.

Between this first Plowing, and the second, is the only proper Time for laying on your *Manure*, of what kind soever. The several sorts, proper for Lands of this Nature, are *Sea-Sand*, *Common-Sand*, *Sea-owse* of the lightest Kind, not such as is black, and greasy: *Sheeps-dung*, mix'd with *Sand* under a cover'd Fold, as before describ'd; or, for want of any of these, the *Compost* in your Stercorary.

Which ever of these you lie most convenient for, you may use, in the following Proportions: Of *Sea-sand* you must lay upon every Acre, five and twenty Loads; Of *Common-sand* never less than a hundred, which Quantity you may double, if it lies commodiously: Twenty Load of *Sea-Owse* is sufficient; and fifteen of *Sheeps-dung* so mingled: And, if you are obliged to relye upon the Assistance of your *Stercorary*, you must lay about twenty Load upon an Acre.

According to the Manure, you are obliged to use, your Charge will be more, or less considerable in the number of Carts, and Teams necessary; for this Rule you must be sure to observe punctually, that the *Manure* be all laid on, by the last Day of *July*: In which Time the Plowman, a Labourer being employed in spreading the *Manure*, as it is daily brought on,
does,

does, with the same Plow he us'd before, give the second stirring to the Ground, in order to turn in the Richness of those Helps, you have bestow'd upon it. By this means the Sun, high and powerful in this Season, will be prevented from exhaling the *Virtue* of your Manure, as it always does in the Common way of letting it lye, in little Heaps, on the Field for a great while together.

You may observe, that I allow a shorter Time for *this* Plowing than for the *first*; and the Reason is, because the Ground having been broken up before, and the Turf now rotten, it is become more Mellow, and the Draught so much easier, that a Team may dispatch almost a double Quantity in a Day.

It is now the time to *Harrow* over your Ground, with a heavy wide-tooth'd Harrow, and a great Weight

laid upon it; by which means more Mould will be rais'd, the Clods broken into smaller Pieces, and the Manure mingled with the Soil in every Part. It is not enough to Harrow once, and away;—You must go over the same Ground, again and again, till you have made it as smooth, and crumbly, as is requisite. And this Work will very well employ your Team, from the end of *July*, to the middle of *August*, about which Time shou'd be begun the third, and last Plowing.

This Time, which is commonly call'd *Seed-Plowing*, the Team shou'd go a cross the former Furrows, and turn up the Earth in different Lines from those which were made by the two former Aratures: This Work will be finish'd about the end of *September*.

Now,

Now, let your Corn be sow'd, and let it be *Wheat*, after the Rate of two Bushels upon every Acre; when the Seed is on the Ground, let your Team be fasten'd to another kind of Harrow, not so heavy as the former, and whose Teeth are small, and very close to one another; by the Help of which the Grain will be all cover'd by the Mould, and lie pretty near to an even Depth; two very great Advantages, in the Practice of Husbandry.

But, here, two Cautions naturally offer themselves to your regard; the first, as to the *Choice* of your Seed Corn, and the other, as to your *Preparation* of it; either of which, tho' neither is generally observ'd, cannot, without great Damage, be neglected, whether in Wheat, or Barley.

Let your Corn be brought into the Corner of a large *Barn Floor*, or great *Boarded Hall*, such as few Country

Houſes are without; order a Man, with a broad wooden Shovel, to throw the Corn, with all his Force, towards the oppoſite Corner of the Barn, or Hall, the laſt is generally the fitteſt for it:—In this Exerciſe, all light, ſmall, ſhrivel'd Grain, and the Seeds of *Cockle*, *Darnel*, and other *Weeds*, not being ſo heavy, as the ſolid Corn, will fall ſhort, and lie neareſt to the Man, who throws them, while ſuch, as is large, plump, and weighty, outſlying all the Reſt, is ſeparated widely, and may eaſily be gather'd in what Quantity you pleaſe.—Experience only is capable of making Men believe the wonderful Advantages of ſowing Seed, thus choſen.

Take your Corn, when it has been thus obtain'd, and throw, by a Buſhel at a Time, into a large Veſſel full of Water; let a ſtrong Man ſtir it with a Staff, as violently as he can,
for

for a considerable while together, and then, giving it a little Time to settle, skim off all that swims upon the Surface; and repeat this Labour, till no more rises; after which, take out the Corn, which is sunk to the Bottom, and lay it by for *Seed*, proceeding in the same manner, till you have your intended Quantity.

Now, make a *Brine*, by throwing *Bay-salt* into *Rain-water*, till it becomes of strength enough to bear an *Egg*: In this Liquor steep your *Seed Corn* thirty Hours; less Time will have no manner of effect; observe this, and regard not the contrary opinions of any Men, let them pretend to never so much Skill.

When you take your Corn out of this Brine, spread it upon a smooth Floor, and, scattering upon it good store of the *fine-ground Powder of slack'd Lime*, sweep it up and down,

and mingle it with the Corn, till every Grain leaves clinging to another, and becomes as it were, *Candied* with the *Lime*: And, in this Condition, let it be *Sow'd*, never entertaining a moment's Doubt, for the infallible encrease of your Harvest.

Weeding wou'd, in this Case, be an unnecessary Instruction; for Grain, thus manag'd, and Ground thus order'd, will admit no Rival, till the Crop is down. *Weeds* are the exulting Triumphs of *Neglect*, or *Ignorance*, and the very *scandal* of our *Husbandry*.—But Harvest comes, and, if you reap, and carry in, with the same Care, you have us'd, in the foregoing Part of your Labour, depend upon it, and you will find yourself agreeably deceiv'd, if you don't believe it, 'twill be no unlikely Thing to count *two thousand Pound*, as the Produce of your *one hundred Acres*.

About

About *Michaelmas* after, take the Opportunity of a very dry Day, and moderately windy, to set Fire to your *Stubble*, in so many Places, as may serve to carry the Flames over the whole surface of the Ground, on which the *Stubble* of such a Harvest, as you may expect, by the management describ'd, will grow so thick, that the Ashes, and warmth of the Fire, will be as much Advantage to the Soil, as the best of your common Dungings. —When you have done this, let the Land be Plow'd up in *Ridges*, and lye so, till the beginning of next *February*.

And here will come in a *Caution*, that, if these Lands lie very *flat*, and apt to be *watry* in the *Winter*; your Plowman must be directed to lay his Ground in *Ridges*, which every Country Fellow knows the manner of doing, though they are not so well

acquainted with the Knowledge, that the general Ridging of all kinds of Lands for Winter Corn, as is commonly practis'd, is ridiculous, and by no Means necessary.

You may take Notice, that, in such Lands, whose moist Nature requires Ridges, 'twill be requisite to make your *Harrows* the full *Breadth* of a *Ridge*, and so contriv'd, as to clap close on each side of it, to prevent the Inconveniency of throwing down too much Earth into the Furrows.

But to return to our hundred Acres, which we left under a Rest, by Farmers, call'd a *Winter-Fallow* : Let your Plowman renew his Work, at the first coming in of *February*, and, Plowing across the old Ridges, lay his Ground in an uneven Surface, full of little Hillocks, and low hollow Places : And, in this Condition, let him sow it with Barley, the first dry weather in *March*,
after

after he has done Plowing it; and then, Harrowing it well over, first, with the wide-Tooth'd, and then with the close Harrows, it will cover the Seed at a good Depth, and lie as smooth, and neatly, as possible.

I need not remind you, that you are to chuse your *Barley* Seed, and steep, and manage it, when chosen, with the same Care you us'd, in your Seed *Wheat*. Some time in *May*, when the Ground is hard, and dry, it will be proper to make one Horse draw as heavy a Roller, as he can, over your Barley, by which Work the Ground is not only made level for the *Mowers*, but the Earth being press'd hard down, the Spires are check'd for some Time, and the *Roots*, by that means, spreading, and growing stronger, are the better able to shoot up a multitude of Stalks, and nourish a fuller Grain, and more plentiful Harvest.

This

This second Crop is a Grain, in *use*, and *price*, inferior to Wheat, and, consequently, will fall short of your first Year's Profit ; but a second Harvest of twelve, or fourteen hundred Pound, will be no despicable Reward of your Diligence, and you may oftner be disappointed by a *greater* Gain, than you will by a smaller.

As soon as this Crop is well in, Plow up the Stubble, and sow Wheat with the same Care you us'd before, Harrowing it well in : And there is no Reason to fear but you shall Reap as great an Encrease this Year, as you did the first.

But now we are come to the Pillars of *Hercules* : A third Year's Crop is a skilful Husband's *Ne plus ultra*, in the whole Course of his Practice. One more Plowing works your Soil into an almost incurable Consumption ; but leave off, while all is well, and be
but

but contented with the same Profit, by a different Application, and this single Prudence will make the value of your Land, as durable, as the Land itself; while other Men, for want of skill in this essential Point of Husbandry, are forc'd to rest contented with a constant Income, and a poor one, or, for a present extraordinary Advantage, entirely ruin the future worth of their Estates.

To prevent this Fate upon your Land, as soon as your third Crop is down, burn up the Stubble, as before; and, Plowing up the Ground with great Care, go over it with fine tooth'd Harrows, which may gather all the fibrous Roots, and other Trash together; which being laid in little Heaps, and burnt, the Ashes must be spread about, and the Ground again Harrow'd to an exquisite Fineness.

When

When this is done, let the Ground be cautiously, and in a still time, Sow'd with *Clover*, not *English Clover*, but the Seed, which is brought from *Holland*, and *Flanders*, and may be had cheap enough, at most of the Seed Shops, in *London*.—You may know, whether the Seed be good, by trying it in Water, where, all that swims, is to be rejected. There is a certain *Fly*, which is sometimes known to eat this Seed in the Ground, but that Inconvenience is easily prevented, by steeping it, for the space of a Night, in *Soot*, and as much *Urine*, as will make it a *Liquid*. I desire, that one Rule may be particularly observ'd, and that is, never to Sow less than *twenty Pound of Seed* upon an Acre.

Many will object against this, as a double Charge, because, *say they, I never knew any Man, who sow'd above half that Quantity*.—I answer, they never knew

knew any Man, who Reap'd half the Profit, which he might have done by it, if they had follow'd my Directions. —It is observable, that there are more ignorant Men, who profess Husbandry, than of any other Art; and yet fewer of this Profession, than any of the rest, who think they can be *taught*. A Man, who was not possess'd of this Temper, wou'd easily imagine that the thicker this little Seed is sown, the thicker it will spring, and the better keep down all Weeds, and common Grass, and, consequently, become of double Advantage.

Sowing *Clover* thus in *September*, instead of the *Spring*, and sowing it alone, has many Conveniencies: I will rise thick, and swarth the Ground, before the hard Weather comes in, and thereby not only gather Strength, to defend itself against the Winter Frosts, but will be so early in the Spring, that you might Mow it, the first time, in
the

the very beginning of *May*, or perhaps sooner.

When the first hard Frosts have bound the Earth so fast, that you may bring Horses upon it, without Damage to the Roots of the Clover, this is the very Point of time, in which you shou'd bestow about eight or ten Load of *Sea-owse*, *Sea-sand*, *Sheeps-dung*, or that of your *Stercorary*, upon every Acre, taking Care to spread it as equally, as may be, that, when the Frost dissolves, the Rains may drive the strength of the Manure into the Earth, which, in the tender Infancy of her new Turf, will easily admit it, to the nourishment of the Roots, and surprizing encrease of your Clover, both as to Quantity and Sweetness.

Three years your Clover, thus manag'd, will thrive amazingly, and produce an unexpected Profit; but let not that tempt you to continue it longer. At the end of the third
Sum-

Summer, break it up, and, after two Plowings, sow it, in the Spring, with *Barley*: After the *Barley*, take two Crops of *Wheat* successively, and then, without *Manuring* it, lay it down with *Clover*. Always observe an *alternate Husbandry*: Three Years *Plowing*, and three Years *Clover*, you cannot guess the Advantage, which will accrue, by a strict Adherence to this one Rule: Your Land, so manag'd, will for ever retain its full Vigour, Yearly afford the largest Crops, and never fall under a Possibility of being work'd out of Heart: A Fate, which almost all the Lands, in *England*, are forc'd to submit to, by the present Practice.

I will add a little more, as an Instruction how to make the *greatest Profit* by your *Clover*.—Here again, I take the Liberty to lead you out of the *common Road*, as, indeed, I have done all along, and shall continue to
do,

do, till I have done with the Subject. —I write the Rules, which ought to be practis'd, and cou'd I contrive to make them as *general*, as they are *profitable*, I shou'd happily accomplish that *Public Good*, which I aim at in this Essay.

I shall neither advise to feed it with *Oxen*, *Sheep*, or *Horses*, nor to mow it for Hay, or Seed; nor any of those general Purposes, to which it is applied. There is a *Profit*, which exceeds them all, and yet was never practis'd, that I know of, but by two, or three Gentlemen of my Acquaintance, and by my Advice, and Persuasion.

About the same time you sow your *Clover*, or a little sooner, sow ten, or fifteen Acres, in any Part of your Estate, with *Turnep Seed*, for a Use to be mention'd presently.

About

About the beginning of *March*, take your best Opportunity to buy three hundred *Sows*; all such, as are to *Far-row*, in a Month, or thereabouts. In several convenient Places of your Clover Ground, let there be made little *Sties*, which may be easily form'd of *Boughs*, or *Reeds*, in the Corners of Fields, and under the Hedges. In these *Sties* let your *Sows* be kept up, and fed daily with the *Turneps*, which you sow'd the *Autumn* before: At first, you must be at the Trouble of boiling them, Tops and all, and giving them in the Troughs with the Water not yet cold; you may afterwards but just *scald* them, and so, in a Week, or ten Days, they will eat them *raw*, with the greatest Greediness, and Pleasure imaginable.

In the beginning, or about the middle of *April*, these *Sows* will *Far-row*; which having done, you must

continue your *Turnep-feeding* no longer, than till the *Clover* is pretty high; and then let the *Sows*, with their *Pigs*, run at Liberty among it. 'Tis impossible for one, who had not seen it, to imagine with how much Eagerness the *Swine* will graze on *Clover*: The *Milk* is hereby so strangely encreas'd, that the *Pigs* shoot forward at a double Rate, and, as they leave off sucking, take to feeding on the *Clover* with a wonderful Delight; by which they prosper so fast, that every *Pig* will, by the end of *October*, be readily sold, in any Market, for *twenty or five and twenty* Shillings. The Treading of *great Cattle* is apt to break the stalk of *Clover* Grass, and *spoil*, by trampling down, a much greater Quantity, than they *eat*: But *Swine* are never hurtful this way; and, if you fear their *Rooting* up the Ground, you easily prevent it, by a Ring in their Noses,

ses, though I never knew a *Hog* break up an Inch of *Clover*. They *graze* here with more Pleasure, than they cou'd *root*: But there is one Advantage, which is inimitable by any other Practice; their *Dung*, which, in direct Opposition to the vulgar Error, is the best, and sweetest of all other, does in their three Years pasturing upon the Soil, so wonderfully enrich it, that it will never need additional Manuring, but produce prodigious Plenty of whatever Grain you sow it with.

See here, then, a Practice preferable, every way, to what is commonly follow'd: Will they object 'tis *chargeable*! How poor an Argument is that, when they oppose it to the *Profits*: Will they allow *six* Pigs to every Sow? They cannot contradict such a moderate Expectation; will they admit them to be sold, at seven or eight Months old, for twenty Shillings?

Per-

Perhaps, they'll say, it is too much; I answer, No; it is too little: The Sows will yield forty Shillings a-piece from those, who buy for Bacon; and, at that Rate, three hundred *Sows*, and eighteen hundred *Porkers*, will, upon your hundred Acres, produce, every Year, four and twenty hundred Pounds.

They are amaz'd!—and thay have Cause! This, tho' a Secret, undiscovered by our Croud of Husbandmen, is plain, is easy; and, set aside *Experience*, 'tis demonstrable by common *Reason*; yet was it never practis'd, and will, even now, be oftner *ridicul'd*, than *imitated*, till it becomes as common, as the *Spade*, or *Dung-Fork*.

Let it not be objected, that I make no Allowance for the Deaths, or other Casualties, unavoidable in such a numerous Herd; I have prevented it already: Why else shou'd I allow a Sow
but

but *six*, when she is commonly known to *double* that Number? If 'tis urg'd, that eighteen Swine will overstock an Acre; 'tis a mistake, and will be found so in the Practice. But then, by the way, allow a Difference, betwixt Clover *their* way, and Clover *mine*.

I have done with the *heavy* Grounds, and come now to your Lands of a *light* Temper.—For method's sake, we will begin at *Lady Day*, upon this Land also. Here the *light Plow* is to be us'd, and, as to the turning down the Turf, and laying smooth the Furrows, the same Care is to be observ'd on one Land, which is recommended on the other. Of this Work, two Horses, with the Plow aforementioned, will constantly break up two Acres a Day; and, beginning with *April*, and allowing as before, for Sundays, &c. the hundred Acres will be very well

K

Plow'd

Plow'd for the first Time, by the latter end of *May*.

Betwixt the *first* Arature, and the *second*, these Lands are, also, to receive the natural Recruits, which you think fit to give them; and that may be either *Chalk*, *Marl*, *Clay*, *Sheeps Dung* prepar'd with *Earth*, not *Sand*; *Sea-Owse*, of the closest black, fat kind; all sorts of *Mud*, or, for want of either of these, your *Stercorary* may supply you.

Five and twenty Load of the last, is the Quantity most proper; thirty of Chalk; of Marl, at least a hundred; and of Clay, a little more. Twenty Load of prepar'd Sheeps Dung, and as much of Sea-owse; and if you use Mud, less than forty, or fifty Load will be too little. Use either of these Manures, as your best Conveniency invites you, and, as was directed before, take care, that your Plowman turns it in, as fast as it is brought on, and spread upon the Surface.

But

But here comes in a necessary Caution, that your Men begin to bring on the Manure on that end of your hundred Acres, which your Plowman first began to break up, that the Turf may be rotted, before it is turn'd up the second time.—Be regardful of this Rule, or you will find the Neglect of it produce a great deal of Confusion.

When the Manure is all turn'd in, bring on your heavy Harrows, and go over the Land so often, as till the whole Mass is exquisitely mingled, and the Mould becomes fine and dusty: You must be *doubly* careful in this Operation upon your *light* Lands, which ought by the Harrow to be laid as smooth, and level, as a *Table*.

About the Beginning of *August* will come on your *Seed Plowing*, properly so call'd upon these light Lands, because you must here *Plow*, and *Sow* together.

ther. As to the Seed Corn, the same way of chusing, steeping, and preparing, which was directed for the *heavy* Ground, is as necessary, and as advantageous upon this also: But the way of *Sowing* differs widely.

Let one Man, with a Hopper full of Seed, walk down in one Furrow before the Plow, which follows him close in another:—This Man must drop the Corn, by little and little, as he goes along, directly in the Bottom of the Furrow, which will be presently cover'd at an equal Depth by the Earth, which the Plow throws out of the other Furrow.--By this means, the Corn will spring thick, and in Rows, about a Foot asunder, which, meeting at Top, like an Arch, will permit no Weed to rise under them.

Less than two Bushels of Seed will be enough, in this way of Sowing,
and

and the Ground will need no Harrowing after it. The Birds will devour none of the Corn, nor can the Frosts destroy any; both which Inconveniencies the other way is subject to; but you must note, that only *light, mellow* Grounds are capable of this Management: A *heavy, binding* Soil wou'd choak the Grain, before its tender Spires cou'd find a Passage through it.

An Objection may be rais'd, *that I suppose all Soils are fit to bear Wheat.*--I own it; and will affirm, with a just Contempt of the Slothful, and the Diffident, that, by Labour, Skill and good Manuring, a Man may reap Wheat from a *Rock*. No Ground is unfit for any kind of Grain, but through the Ignorance of its Proprietor: Earth is a passive Body, and will change its very Nature, in obedience to the *Tiller's Art*. *Virgil's non Omnis fert Omnia tellus*, is only meant, that

all Earths, in their natural State, are not fit for every Grain, but that judicious Cultivation is necessary to bring them into such a *general Capacity*.

It is to be understood, that the third Plowing just now describ'd, is to be made across the Fields, directly contrary to the two former, as was directed in the Discourse of *heavy Soils*.

When the first Year's Harvest is over, which, in these Soils, will be very early, burn up the Stubble, as was taught before, that the Ashes may fall upon the Surface, to the Benefit of the Land they cover.

But here is another Husbandry to be practis'd.—You must, besides your *Barley* Roller, cause another to be made, and stuck pretty full of strong, iron Pegs, that, as the Roller goes round, may pierce the loose Ground, to the Depth of two or three Inches, and scatter abroad abundance of fresh Mould.

When

When you have gone over the Ground with this pointed Roller, sow it with *Turnep seed*, about ten Pound upon an Acre; and, when the Seed is sown, let your smooth Roller (the heavier the better) be drawn over it. This will press the Seed into the fresh Earth, and cover it very well. These Turneps, when they come up, shou'd be *Hoed*, if they grow too thick; a Labour, which every Countryman knows the manner of performing:— It wou'd not be amiss, to steep this Seed in *Soot*, and *Urine*, as was directed about *Clover*. Thus have you two Crops in one Year; and your Ground much better'd, by the Growth of the Turneps.

This latter Crop, being gather'd and dispos'd of in the Winter, you must, about the end of *February*, or beginning of *March*, have given your

Ground a good, deep Plowing, and immediately sow it with the best, white *Pea*, you can obtain : The best way to sow them is, after the same manner, as you did your *Wheat*, upon that very Soil ; and so two Bushels will be enough upon an Acre.

One Plowing, after the Pease are off, about *Michaelmas*, and another in *February* after, will certainly qualify the Land, for an admirable Crop of Barley.—And, as soon as this third Harvest is over, remember the foregoing Directions, and prepare your Ground, as you did the *heavier* Soil, when you sow'd *Clover*.

Now, there is a foreign Grass much properer for *light* Lands, than *Clover* ; 'tis generally known by the Name of *St. Foyne* ; but that, which I have seen, in several Parts of *Berkshire*, *Wiltshire*, *Somersetshire*, and many other Counties, is a bastard Sort, and much
in-

inferior to the true *St. Foyne*, which may be had, very reasonably, from *Dunkirk*, or *Calais*, and is yearly imported in great Quantities, and sold in the Seed-shops at *London*, and elsewhere.

This Seed being much larger than Clover, must be sow'd in a much greater Quantity. Four Bushels to an Acre, will be better than three, which is the least you can venture to sow.—Observe the Directions given you for Clover, as to Manuring, while the Turf is tender, and the Earth frozen; but as to the time of letting it grow, that may, if you please, be *five* Years, for so long it will continue in its prime Perfection; and, running into a large knotty Root, does so enrich the Ground it grows on, that, after it has born *St. Foyne* five Years, it will afford three excellent Crops of what Corn you please; and so improve itself, by alternate Burthens of *Grass*,

and *Grain*, till it arrives at the utmost Perfection, which Land is capable of reaching.

Nothing is so Sweet, nothing so Innocent, nothing so nourishing, as this *St. Foyne*; but, above all, it is observ'd to increase Milk, in Quantity, and Quality, beyond any Grass, yet known, in the whole World. And it is, for this Reason, that I advise you to keep *Cows* upon it, and make your five years Profit, by a *Dairy*.

But, when I say a Dairy, imagine not, that I mean such a Dairy, as is commonly kept in *England*: Wou'd you know what kind of Dairy?—I will hasten to inform you, and conclude my Essay, with this useful Particular.

The worst Acre of your hundred, improv'd by this *Grass*, will very well maintain *four* Cows, from the first of *April*, to the end of *October*, and after,

ford, besides a sufficient store of *Hay*, to make good part of their Subsistence the four Winter Months following.

You must buy then about four hundred *Milch Cows*; but take Care you chuse them with Judgment: There are bought your largest sort of *Runts* from *Wales*, for less than fifty Shillings a Cow, with a good Calf at her side, which good Husbands dispose of, as soon as they can.—You will observe, that they may make too good a Use of the Milk, to afford the Calf his share of it.--They shou'd keep these Cows about twelve Months, and then, selling them for about four Pounds a piece, stock themselves with such, as are *New-Milch'd*. They shou'd observe this Rule, every Year, and the Trouble is rewarded sufficiently, by the Advantage it will bring them; for, besides the Profit they will make, by *selling* dearer than they *buy*, they avoid

the Inconvenience of having any thing to do with *Bulls*, and the Consequences; so that they wou'd preserve the Cows in their *full Milk*, and find it no uncommon thing for one of these *Welsh* Cows to be milk'd twice a Day, and afford a Gallon and a half at a Meal.—Four hundred of these Cows will cost a thousand Pound, and you will perceive, that, coming from a *poor* Pasture to a *rich*, they will prosper, and encrease, both in Milk, and Size.

In eight convenient Places about your hundred Acres, let there be built eight thatch'd Sheds, a little rising in the middle, to carry off the Rain: The height may be ten Foot, and the Breadth *thirty*. Each of these Sheds shou'd be a hundred and twenty five Foot long; and, under the highest Part, directly in the middle, you may raise a slight Partition, lath'd,
and

and plaister'd, which serves to support the Ridge of the Roof; while the two Sides are sustain'd by square wooden Posts, about eight Foot high, and plac'd at proper Distances.

On either side of the Partition Wall, let there be fix'd a kind of Rack, like those in Stables, which is to run the whole length of the Shed, and must be plac'd as high as a Cow can reach her Fodder from. The Shed must, next, be divided into *Stalls*, like those for Stone-Horses; and each Stall will be about five Foot broad: The length of these Stalls shou'd be exactly fitted to that of a Cow, that a cross Bar being plac'd at the outward end, may keep the Beasts from running backward.—Thus every Shed will hold fifty Cows, five and twenty on each side of the Partition.

To every one of these Sheds you must appoint a Man, whose Business it will be to clean the Place, and carry
off

off their Dung; as also to mow the *St. Foyn*, every Day, and give it to the Cows, in the Racks beforemention'd. This Man, beginning at one end of his Proportion of Ground, and going gradually on to the other, the first Place will always be fit to mow again, by that Time he has gone through his whole Division:—Your Cows are thus fed at Discretion, with neither too much, nor too little; They are not pester'd with the scorching Heats, nor troubled with the stinging Fly; which, in open Pastures, often makes them whisk about, and trample down more Grass than they eat.

At each end of every Shed, you must build a slight Room of Brick, thirty Foot square, and ten Foot high; which is to be divided the Cross way of your Shed, into two Partitions, each fifteen Foot broad, and thirty Foot long. That, which joins to the Cow-house, must be pav'd with Tiles, and
is

is to serve for a *Dairy*; the other must be Floor'd, and Window'd, and is to be a Lodging Room for Dairy Maids.

Every Shed will require five Maids, that is, to every ten Cows, one Dairy Maid: Fewer might serve, but 'tis better to exceed, than fall short in this Particular. Thus, each Dairy will have two or three Maids belonging to it, whose Lodging will be the Room adjoining, and whose Care is to extend into the Shed, on both sides the Partition, to the five and twenty Cows, which are nearest to their Station.

All along both sides of the Partition, at about a Foot above the Ground, let there be fix'd close to the Wall, a strong Pipe of *Lead*, a little less than an Inch Diameter, both which Pipes, being somewhat rais'd, exactly in the middle of the Shed, must have a gentle, and almost invisible Descent, from that Rising, to the Dairies; through

through the Walls of which their ne-
ther Ends are to be brought, and
there wrought into one another, that
whatever descends through them, into
either of the Dairies, may have issue
but at one Mouth.

This Mouth of the Pipes must be
made very small, and neatly fitted in-
to the hollow end of a strong woo-
den Axel-Tree, so that while the
Axel-Tree is turning swiftly round the
mouth of the Pipe, it may by no
means strain it by the Motion, but
receive into its own Hollow the Milk,
which descends through the leaden
Pipes, without spilling any.

This Axel-Tree is only hollow for
three Foot of its length, and passes
so far through a Wheel, or Vessel,
like a Barrel, only much larger, in
its Circumference. The Axel-Tree,
which this Vessel is to turn upon, is
bor'd very full of round Holes, thro'
which it delivers the Milk into the
Vessel,

Vessel, as fast, as it receives it from the Pipe. The Vessel must be capable of containing, at least, three times the Quantity of Milk which it is designed to receive ; and there must be six Wings, or thin Pieces of Wood glew'd on, to the hollow Axel-Tree, whose Length, and Breadth, must be so contrived, as to leave a free space of six Inches, at either End of the Axel-Tree ; and a Foot, between their Edges, lengthways, and the smooth inside of the Vessel ; in the most convenient Part of which must be contriv'd a Door, to open and shut down upon occasion, as closely, as if there was none. This Door will perform its Work very neatly, if you line the Inside, and Edges, with the same kind of Cloth, which is commonly us'd in the pressing of Cheeses.

The other solid end of the Axel-Tree must extend itself to about five Foot longer, and the whole
Length

Length may be supported by square, wooden Posts, and *turn*, in their Tops, which are to be made hollow, and kept greas'd, for that Purpose. This end of the Axle is to be fasten'd into a Wheel, exactly like those, which are us'd in many Places, for the roasting Meat. The Diameter of this last Wheel must be within six Inches of the height of the Dairy; and two or three large Dogs, being put into it at a Time, will *turn* it, with extraordinary swiftnefs. The Dogs are easily taught, and will, at last, take Delight in the Exercise: I have known a large *Buck*, brought up to the Practice of this Labour; and it is wonderful to see the Force, with which he runs round, an Hour, or two together, and turns a Wheel of ten Foot Diameter.—But you must make your Wheel as light as it can possibly hold together.

I have but one thing more to say,
and

and I finish this Direction. Pretty near that side of every Stall in your Shed, to which the Maid must come to milk the Cow that belongs to it, let a Hole, as small as will serve the occasion, be contriv'd by your Plumber, in the upper Part of the leaden Pipe, to shut, and open, with a little Screw, which Screw, for fear of losing it, may be fasten'd, by a little Iron Chain, to the Body of the Pipe.

I have endeavour'd, in the Description of all this, to make my meaning as plain as possible. If you do not comprehend it, at first, you *will* after two or three times Reading, and Considering it. I wou'd have no Man imagine, that I propose a thing too Troublesome; for one great Benefit in the Practice, I am here recommending, is, that it will save above half the Labour, which is, at present, absolutely necessary in every Dairy in the Kingdom. The

The milking Pails, which must be us'd here, are very broad and shallow ; in shape not much unlike a Baker's *Sieve*. They must stand upon three Legs, of a little more than a Foot high ; and, from the Bottom of one part of the Rim, must come a long tin Pipe, somewhat resembling the neck of a *Still*, the Nose of which is to be put into one of the Holes in the Leaden Pipe ; and the Pail, at the same Time, standing under the Cow ; the Milk, as fast as it descends thro' the *tin* Pipe into the *Leaden* one, is thence convey'd into the Vessel, which I, just now, describ'd, in the Dairy.

Observe, that, to prevent the Hairs, or other Impurities, from descending with the Milk, the mouth of the tin Pipe, which opens into the Pail, is to be cover'd with a straining Cloth. Thus, the Maids, removing from one Stall to another, dispatch their Work neatly, and must remember to skrew up every Hole, before they leave it.

Morning, and Evening, before they begin to milk, they must put their *Dogs* into the great Wheel, by whose motion, the Vessel, which I call a *Churning-Mill*, being turn'd swiftly round, receives the Milk, yet warm, thro' the little Holes in the hollow Axel-Tree; and, by the means of those six Wings, I mention'd, it is agitated with so great a Violence, that there is not only a much larger Quantity of Butter produc'd this way, than by the other, but it is, in every Degree, so much beyond it, even in Taste, and Colour, that the Difference is incredible. And what is yet a more considerable Advantage, the *Cheeses*, which you make of the Butter-milk, may be reckon'd among the best, and richest, kinds in *England*.

When the Dairy Maids return from Milking, by that time they have wash'd their Pails, and taken a little rest,

rest, they have nothing to do, but open the Door of the Mill, and gather the Butter, which they will find in a huge Heap, ready churn'd to their Hands: after which, letting out the remainder into a Cistern, which shou'd be near, they may proceed to make it Cheese, in the very same manner, as they wou'd in the common Practice of their Country.—But the *Dogs* must, yet a little longer, continue in the Wheel.

You will wonder what Business they have in the Wheel, when the Vessel is empty?—Your Maids must have a good Quantity of *hot* Water just now in readiness, the greatest Part of which must be pour'd into the Vessel, and the Door made fast upon it; the Dogs may then be permitted to renew their Labour, for half a Quarter of an Hour, in which Time the Vessel will be compleatly wash'd, and scalded, and then the Water being

ing let out, the Door must be kept open, till next Milking time.

The leaden Pipes are kept sweet by the same means; for, in that middle Part, where each Pipe rises highest, is to be a larger Hole than any of the other, into which a shallow, broad Funnel, being put, a convenient Quantity of scalding Water must be pour'd in, which runs thro' the Pipe into the Churning-mill, and carries away all the reliques of the Milk, as it passes along.

It would be a needless Labour, should I go about to compute the particular Charges of such a *Dairy*. Every Reader will be able enough to do that for himself, and, consequently, judge of a greater, or smaller, in Proportion. I will only tell you what is a most certain Truth, that you will seldom have a Cow, which shall bring you so little Profit, as ten Pound a Year, and yet, at such a Computation, the yearly Income of your hundred
Acres

~~Acres~~, thus employ'd, will amount to four thousand Pound.

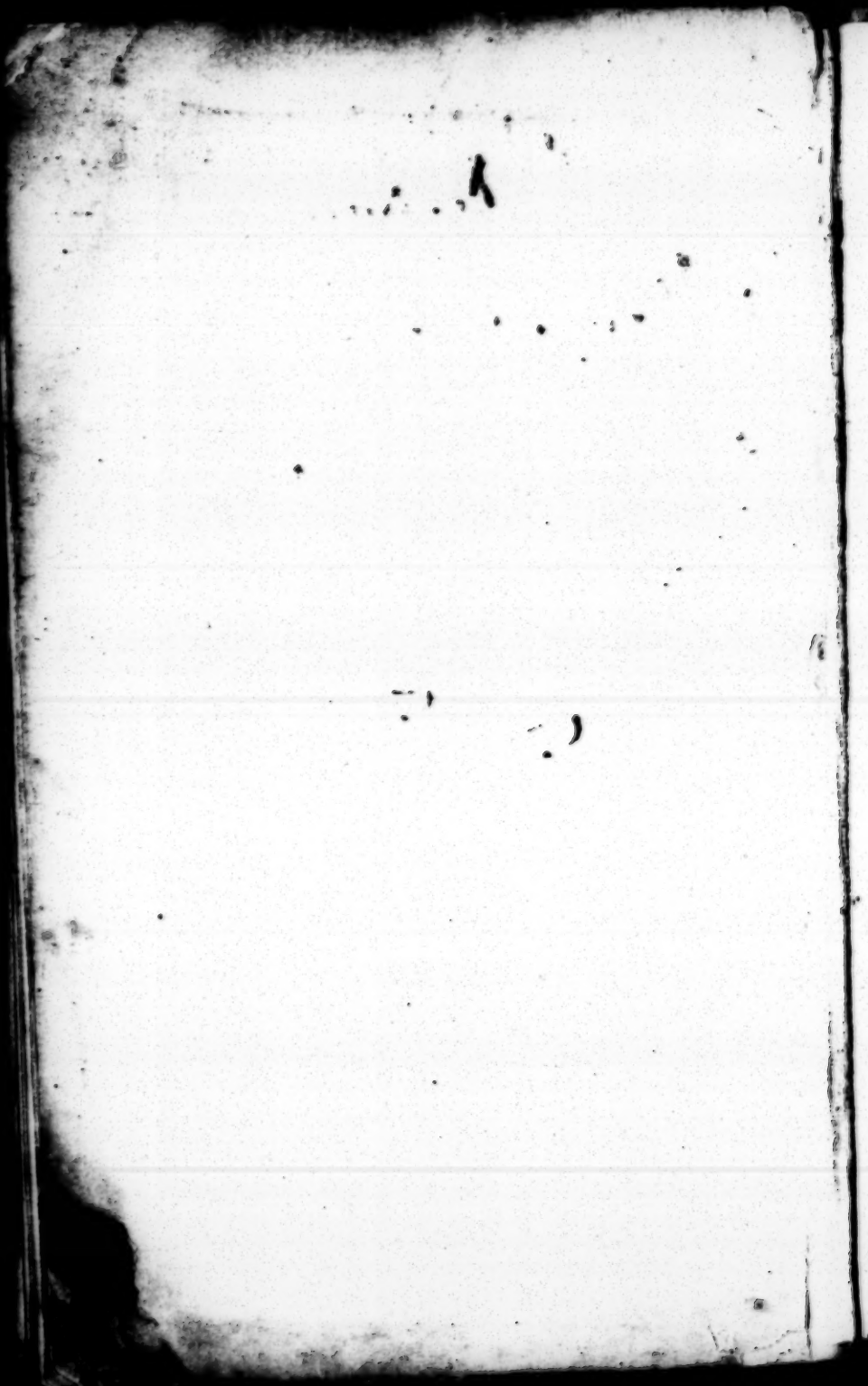
And now, I hope, I have sufficiently made good my Assertion in the Title Page of this Treatise, (*viz.*) That every private Gentleman in *England*, may double his Fortune in one Year's Time, by Skill, and Industry, in the *Art of Husbandry*; which that they may diligently and expeditiously put in Practice, both for the great and certain Profit to *Themselves*, in particular, and to the Kingdom in general, is the sincere and ardent Wish of the Author, who concludes this Essay with that noted Exclamation of *Virgil*.

O fortunatos nimium, sua si bona No-
rint,
Agricolas! quibus ipsa, procul discor-
dibus Armis,
Fundit humo facilem Victum justissi-
ma tellus.

F I N I S.

Richard. Tull

His Book



1. P. 1. 1.